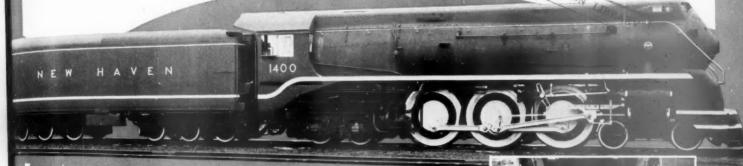
**AUGUST 7, 1937** 

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August 7, 1937

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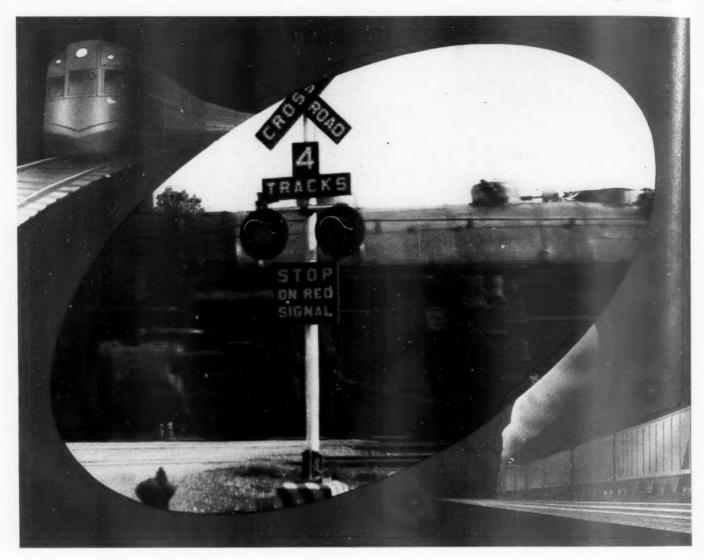
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Our nearest office has the details of this modern improvement in highway crossing protection.

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1881 1937 Union Switch & Signal Co.

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# The Week at a Glance

cool Hotel: One of the hottest spots in the United States—Needles, Calif.—has a cool hotel and Fred Harvey restaurant as the result of the installation of air-cooling by the Santa Fe. Ice is the refrigerant—the plant established at this point for icing refrigerator cars being able, without enlargement, to meet the added load (90 tons daily maximum). The installation is described in an illustrated article herein.

C. L. BARDO: The trustee of the New York, Westchester & Boston and former general manager of the New Haven died on August 2. Mr. Bardo was widely known outside the railroad field as well as in it because of his prominence as president of the New York Shipbuilding Company and his term as the head of the National Association of Manufacturers. The trusteeship of the Westchester line has been ended and equity receivers have been appointed.

RAPS C. & O.: Senator Wheeler, without stirring from his seat on the lid of the cage where he has the Pettengill bill a prisoner, having won his fight to prevent another man—the President—from getting too much power, this week opened up on the Chesapeake & Ohio in his role of Grand Inquisitor of Railways. He questioned the legality of the road's recent issuance of preferred stock as a dividend.

TAXES ON PENSIONS: The taxes which railroad employees have deducted from their pay checks in order to cover pension payments later on cannot be deducted from their income, when they make out their income tax statements—according to a ruling handed down by the Bureau of Internal Revenue last week.

CARLOADINGS: Loadings for the July 24 week totaled 771 thousand cars—up 5½ per cent over last year. All classifications except coal, grain and livestock had greater loadings than in the comparable 1936 week.

FORWARDERS: The I.C.C. attorneys who conducted the investigation into the operations of the freight forwarders and their relations with the railroads have urged that the Commission attempt to regulate them under existing laws—to be supplemented by further legislation if necessary. Many features of the traffic as it is conducted are believed by the commission lawyers to be in violation of the law, and two of the three largest forwarders are found to be essentially railroad owned and operated.

TRAIN LIMIT BILL: The inconsistency of the Senators who opposed the court packing scheme and then turned

right around and led the fight for the train limit bill is spotlighted in the leading editorial herein—which concludes that this bill, if enacted, will (1) increase accidents, (2) largely increase operating expenses, (3) necessitate higher rates or poorer service, (4) force the railroads to fire men they do need in order to hire men they don't need, (5) aggravate shortages of transportation to the harm of the shipping public.

SOUTHERN STOCK: The Southern Railway has circularized its stockholders on a plan to increase the outstanding shares of its common stock from 1,298,200 to 2,900,000, the new issue to be of no par value. Present holders of \$100-par common would receive the new stock on a share-for-share basis and the balance would be held in reserve for future sale in meeting maturing obligations and thus reducing the road's loan capital.

ROGERS ON I.C.C.: John L. Rogers, former railroad boilermaker, has been nominated by President Roosevelt for the Interstate Commerce Commission to succeed Commissioner Tate. Largely by night school study Mr. Rogers won academic degrees in mechanical engineering and the law. He has been in I.C.C. service for 20 years, his most recent post being that of director of the Motor Carriers Bureau.

I.C.C. AND INCOME BONDS: In a proposed plan for the reorganization of the Western Pacific, the Bureau of Finance of the commission has provided for the issuance of income bonds—which, because of its previous statements regarding this class of securities, were generally assumed to be anathema to the Bureau.

HOME TOWN PARTY: The Better Service Club of the Norfolk & Western at Portsmouth, Ohio, one day last week played host to business men of that municipality in an inspection tour of the road's extensive terminal and shops at that point. Each guest was given an attractively printed folder, with a photograph of the road's newest locomotive. giving a thumb-nail sketch of the history of the N. & W. with relation to Portsmouth and its present contribution to local welfare in taxes, payroll and to the upbuilding of the community generally. The party was taken to the shops in a special, air-conditioned train.

MODERN DINER: As a further example of what may be done with a standard dining car by way of decoration to give it all the amenities within which might be found in a new car, the work that the Nickel Plate has done along these lines with an existing car is described berein

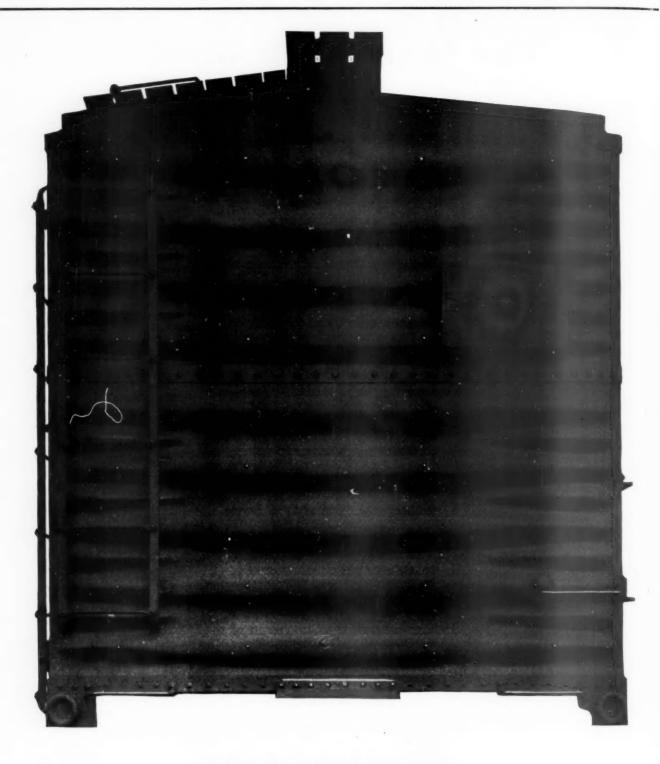
WESTERN FARES: The Western lines will boost their round-trip fares (for tickets good in Pullmans) from 2 cents to 21/4 cents a mile on October 16, the round-trip coach rate to remain unchanged at 1.8 cents. The change has aroused some discussion of the possibility that the Eastern lines might also try for a fare rise, but, even with the boost in roundtrip first class tickets in the West, rates for this class of travel will still be 25 per cent lower than in the East; and coach round-trip tickets will continue at 10 per cent under the Eastern level. A table in the news pages herein compares the various fares being charged for the several classes of travel in Eastern, Western and Southeastern territories.

LIGHTWEIGHT CARS: The Delaware & Hudson is building all-welded cars—hopper and box—which are described in an illustrated article herein. The reduction in tare weight has raised the capacity of 40-ton cars to 50 tons.

EARNINGS: In the first six months of the current year the Class I roads earned 297 millions of net railway operating income—25 per cent up over the first half of last year. Gross revenues for the first six months were 2087 millions (up 11½ per cent) and operating expenses were 1559 millions (increase about 10 per cent). Net income (after deduction of fixed charges) for the first five months of the year was almost 17 millions, as compared with a deficit of 32 millions in the first five months last year.

WAGE AGREEMENT: The railroads and the non-operating unions have agreed on a wage advance of 5 cents per hour for the members of these unions, it was announced by the National Mediation Board on Wednesday evening. The organizations had asked for 20 cents an hour and had taken a strike vote to support the demand. Other objectives of the unions-among which is included a guarantee of employment-are to be the subject of further negotiations, beginning September 1. Meantime the operating unions in Cleveland have announced that their members have voted affirmatively on a strike to back up their demand for a 20 per cent wage increase.

REDUCE DEBT: With a foreword by Henry Bruere, spokesman for large institutional investors, The Savings Bank Trust Company has issued a report, summarized herein, in which it is contended that the railroads should have heretofore reduced their ratio of bonded capital to total and that they should make definite policies in this direction for the future. It is suggested, as one means of enforcing such a policy, that institutional investors require it by joint action among themselves as a prerequisite to further loans.



WHEN THE DRAFT GEAR STOPS

# THE DREADNAUGHT END STARTS

YIELDING UNDER EXTREME IMPACTS ONE FOOT AS A CUSHION AGAINST THE SLIDING LOAD

#### RAILWAY AGE

# The Senate Passes The Train Limit Bill

The passage by the Senate at this particular time of the bill to limit the length of freight trains operating in interstate commerce to 70 cars affords only too striking an illustration of the fact that the failure of the proposed legislation to "pack" the Supreme Court cannot be safely taken as evidence that there has been any abatement of the mania in Washington for passing economic legislation of a tendency destructive of the national welfare.

As has been frequently shown in these columns, what is called "labor" constitutes only about 40 per cent of this country's working population. But "labor" has succeeded in convincing a large part of our public men that it is politically omnipotent. Therefore, they support, or at least avoid openly opposing, almost any legislation for which "labor" asks, or for which the supposed spokesman of even any small pressure group of "labor" asks. The Senate Committee on Interstate Commerce reported the 70-car bill without having any hearings on it during the present session of Congress. The Senate passed it without a record vote; and it had among its strongest supporters some of the senators who had been among the most vehement opponents of the court "packing" bill.

President Roosevelt's purpose in advocating reform of the Supreme Court was to make as sure as practicable that it would hold constitutional any economic measures favored by him and passed by Congress. There never was a bill more indefensible on economic and other grounds than this train limit bill. Perhaps some senators opposed the court "packing" because they desired to be able, for their own political reasons, to vote for economically indefensible legislation while hoping that the court would invalidate it.

Senator McCarran of Nevada, the principal spokesman for this bill says, "The bill seeks to protect life and limb and has no other motive." The Railway Age began energetically publicizing the "Safety First" movement on the railways 27 years ago this summer and believes it can reasonably claim credit for having made a substantial contribution to the great increase that has since occurred in the safety of travel and employment by railroad. With that background of observation and experience, this paper has no hesita-

tion in declaring that any man who claims that limiting the length of freight trains as proposed by this legislation will increase safety of railway operation is either dishonest or too ignorant to have any opinion on the subject.

#### Train Lengths and Accidents

There is, however, a relationship between accidents and the length of trains. All the facts bearing upon the subject indicate that, other things being equal, the reduction in the number of trains caused by increase in their average length reduces the total number of fatalities and injuries, while increase in the number of trains due to reduction of their average length will increase the number of accidents. Between 1920 and 1930, the year in which freight trains attained their maximum average length, the average number of freight cars per train increased from 36.6 to 48.9, or 33.6 per cent. On the theory that increasing the length of trains increases the hazards of operation. there should have been during this decade a large increase in accidents. The total number of railway employees killed in 1920, however, was 2,578 and in 1930 was only 977, a decline of 62 per cent. It may be replied that the number of railway employees declined during this decade. That is true. How much, then, did accidents increase or decrease in proportion to the number of employees? Between 1920 and 1930 the number of persons employed by the railways for each employee killed increased from 839 to 1,562 or 86 per cent. The number of trainmen employed for each trainman killed increased from 288 to 645, or 124 per cent. Stating the facts in another way, during this decade the total number of employees killed in proportion to the total number employed declined 46 per cent, and the number of trainmen killed in proportion to the number employed declined 55 per cent. In the same decade the number of passengers killed declined from one in each 5,673,000 carried to one in each 11,700,000 carried.

The foregoing statistics can point to only one rational conclusion, and this conclusion was reached by a special three-judge federal court in a case involving a statute passed by the legislature of Nevada, Senator McCarran's own state, which limited trains, as does this proposed federal statute, to 70 cars. "A careful review of all the evidence," said the court, "warrants the conclusion that from the standpoint of safety to the public, to travelers on railroads and to railroad employees, the Nevada train limit law bears no reasonable relation to safety, but if enforced would impair and lessen the safety of plaintiff's present method of freight train operation in Nevada."

#### Increased Expense-Who Will Pay It?

What other effects besides impairing safety would the proposed legislation have? It is estimated that it would increase the annual operating expenses of the railways by 150 million to 200 million dollars a year. This increased expense would be passed along to the shipping and traveling public in the form either of higher rates or poorer transportation service. As was said by Senator Bailey of North Carolina last week, "The thought that we can put an annual expense of \$150,000,000 on the railroads and that it will be paid by the railroads is an absurdity—the railroads have not the money." If the increased expense caused rates to be made higher than they otherwise would be, it would be borne by the traveling and shipping public that paid the rates. If it were not offset by higher rates it would necessitate retrenchment in railway expenditures for maintenance, with the result that the public would get less safe and otherwise poorer service. If retrenchments in maintenance were made to offset the increased cost of train operation, then fewer men would be employed in maintenance because Congress had made it necessary for the railroads to employ more men in train service.

#### Effect on Adequacy of Transportation

Another tendency that the proposed train limit legislation would have would be to create a shortage of transportation. If traffic increases during the rest of the year as much in proportion as it has thus far, it will require the most efficient practicable use of all the locomotives and cars that the railways will have to enable them to handle all the freight traffic offered to them this fall. As the Railway Age pointed out in an editorial published last May, "Whether adequate and satisfactory service can be rendered depends as much upon the available supply of locomotives as of freight cars \* \* \* The figures indicate that the railways will have approximately 20 per cent fewer locomotives in the fall of 1937 than in the fall of 1930, and fewer even than in the fall of 1936, with which to handle a volume of freight traffic approximately as large as in 1930 and 15 per cent larger than in 1936. Obviously, therefore, any action which reduced the amount of traffic that could be handled with each locomotive, and especially with each of the larger and more powerful and efficient locomotives, would increase the danger that the railroads would not be able to handle satisfactorily the total available traffic. Now, obviously, legislation limiting the number of freight cars in a train to 70 would curtail the number of cars in every train that would otherwise have more than 70. . . . Thus legislation limiting freight trains to 70 cars probably would create artificially a greater demand for locomotives than could be supplied, and thereby hinder the prompt and efficient movement of freight cars and freight traffic, and increase the shortage of transportation with which the country is threatened anyway."

#### Effect on Needed Railway Buying

In order adequately to appraise this proposed train limit legislation, the demands that the railway labor unions are making for large advances in wages, and other policies of increasing railway operating expenses that are being advocated, it is necessary to take a still longer look ahead to the probable effects upon transportation. If and when there is full recovery of business, the railways will need much larger numbers of serviceable locomotives and cars than they have now. Their buying of equipment and materials, and in fact their ability to buy them, are determined by the amount of net operating income that they earn. In the first seven months of 1937 they ordered 231 locomotives as compared with 131 in the like part of 1936 and 46,120 freight cars as compared with 31,029. (It may also be added parenthetically that in the first seven months of this year they ordered 470 passenger cars as compared with 181 in the latter part of last year.) fortunately, however, the new locomotives and cars acquired do not constitute net additions to the amount of equipment available because so much deterioration of equipment occurred during the depression that the railways are still retiring more locomotives and cars than they are putting into service. Whatever hinders increase in the net operating income will at least correspondingly hinder increase in their purchases of equipment and materials. The inevitable effect, if traffic continues to increase, will be increasingly severe shortages of transportation. In other words, any legislation or other action tending to increase operating expenses will also tend to reduce railway buying and to cause and intensify shortages of transportation.

The proposed train limit legislation would have most or all of the following effects: (1) Increase rail-way accidents; (2) largely increase railway operating expenses; (3) necessitate higher rates or poorer service; (4) deprive of employment men that the railways need by forcing them to employ men that they do not need; (5) aggravate shortages of transportation from which the shipping public may suffer, anyway. Never has Congress considered any piece of legislation affecting the railways or any other industry which was more totally devoid of merit or against which there could be arrayed, from the standpoint of public welfare, more

unanswerable and conclusive data and arguments. And yet many of the senators who supported this legislation are called "statesmen" because they opposed "packing" the Supreme Court in behalf of the validation of economically unsound legislation!

# July Orders Quiet But Top the Previous Month

Domestic equipment orders recorded in July issues of Railway Age comprise 3 locomotives, 1,030 freight cars and 14 passenger cars, which, on comparison, measure a sharp drop from July, 1936, orders for 9 locomotives, 4,469 freight cars, and 34 passenger-train cars. While such figures indicate continuance of the lull in equipment activity which became so evident in June, nevertheless, July purchases of both freight and passenger-train cars show a considerable increase over the preceding month. It is to be remembered also that 1937 thus far exceeds the entire 12-month figures of each of the years 1931 to 1935, inclusive, in all classes of rolling stock, and 1936 as well in the case of passenger-train cars. The export market was entirely inactive during July, constituting a complete break in what might be considered a satisfactory trend in foreign buying during the first six months of the year. No rail was ordered in July, the total for the year remaining 65,017 tons.

The 3 locomotives ordered in July,—one "4-8-4" built in company shops and two switchers ordered from a commercial builder—carry the total for 1937 to 231. Unlike car orders, which rose in July, motive power purchases for the month constitute a distinct drop from the 22 recorded for June. The 7-month total, however, exceeds the 131 units bought during the corresponding period of 1936 by exactly 100. Canadian engine builders, too, saw an especially inactive month, receiving but one order.

Of the month's 1,030 freight car requisitions, the lion's share went to railroad shops, which took 1,000. The month's total is very close to double the 528 cars ordered in June but, as obtains in all three categories of equipment, is far short of July, 1936, its 1,030 cars being less than one-fourth the 4,469 ordered during the latter month. The 46,120 freight cars which make up the seven-month total for 1937, however, as has been pointed out, exceed the 12-month totals for the years 1931 to 1935, inclusive. Indeed they lack only 240 of equaling the 46,360 cars purchased during the whole of 1930. The Canadian freight car trade recorded the purchase of 30 units during the month, which carries the 1937 total thus far to 7,388.

Orders in July for 14 passenger-train cars carry the 1937 record to 470 cars. Coaches did not appear at all on the month's buying list, which included 2 tavern cars, 2 "coffee shop" units, 6 dining cars and 4 baggage-mail combinations. July's group betters the previous month's total by 4 cars and is almost twice the volume of orders placed in May, but falls considerably below the 34 cars ordered in July of 1936. The sevenmonth total in the passenger equipment field, however, exceeds the 181 cars ordered during the corresponding period of 1936 by over 150 per cent and outstrips the 307 total for the whole of that year by 163 cars. Dominion car builders received no passenger equipment orders during the month.

In addition to the orders quoted above there were inquiries outstanding for or contemplated purchases at the end of the month of 4 steam and 20 Diesel locomotives, and 750 freight and 9 passenger-train cars.

The slump which is evident in the July equipment picture is quite probably seasonal in character, with additional restraint placed on buying by the uncertainty in legislation and labor demands affecting the carriers' revenues. But the fact that in all except locomotive orders the month shows improvement over June activity might lead one to expect that 1937's second half year will attain the healthy tenor of its first.

#### How a Country Gets Rich

In 1908 the average employee of one of the largest tire producers was receiving 40 cents an hour. He could buy a tire for a small motor car for \$35. At that time this tire would run an average of 2,000 miles in its life time at an average cost of 1.75 cents a mile. A little calculation indicates that an hour's labor would pay for only 23 miles of use of that tire. Thus to run the car with four tires a distance of 23 miles and merely pay for the wear and tear on the tires the worker had to work for four hours. Obviously few workers owned cars. 1936 the average wage of all employees of this plant was 88 cents an hour. Had this been the only gain which took place in the interval, the laborer would still have had to work one hour to secure 50 miles of use from a tire, or one hour's work would have yielded enough income to pay for the wear and tear on the four tires over a 12.5-mile stretch. Car driving would still be a pastime for a few rich people only. However, several other things happened. Instead of the tire costing \$35 as it did in 1908, it cost about \$8 in 1936. Instead of running only 2,000 miles it would run on the average about 20,000 miles. A calculation will indicate that in 1936 an hour's work would pay for not 23 miles of use but 2,200 miles, a 95-fold improvement.

Thus under the stress of competition the price was greatly reduced and the life of the tire increased by 900%. The real gain to labor (and all tire consumers) came not through wage increases primarily, but through a lowering of prices and an improvement in the product. Similarly, the gains have been broadly shared in the case of the motor car itself, electrical appliances, light bulbs, and a host of other things. The rise in the standard of living comes not primarily in forcing upward money incomes, but in raising real incomes.

Emerson P. Schmidt in Barron's.



The Hotel, Restaurant and Station Building at Needles

# Santa Fe Air Conditions Hotel at Needles, Cal.

Adapts ice refrigeration in an ingenious manner and effects economy by precooling with well water for locomotive supply

Pair conditioning its hotel-restaurant-station building at Needles, Cal., the Atchison, Topeka & Santa Fe has assured comfort for the patrons of the hostelry operated by Fred Harvey at one of the hottest places in the United States. The system adopted is of particular interest because it represents an example of the adaptation of facilities already in existence to a new service. The refrigerant used is ice water obtained by melting ice from the railroad's plant for the re-icing of refrigerator cars at that point, which possesses sufficient reserve capacity to handle the additional load.

The building is a two-story structure 500 ft. long by an average of 40 ft. wide, and is occupied on the lower floor by railway passenger station facilities, in addition to the hotel lobby, dining room, lunch room and kitchen, while the upper floor is given over entirely to bedrooms to which access is afforded by a corridor that extends from end to end of the building along its longitudinal axis. About 11 years ago an air conditioning system was installed to cool the dining room, lunch room and lobby, using a spray system, with a 9½-in. by 9½-in. ammonia compressor, that served also as a standby unit for the 7½-in. by 7½-in. compressor that is employed for food refrigeration. However, the plan to air condition the upper floor of the building embodied the abandoning of this old system and the altering of the ducts so that they could be adapted to a new system of air conditioning the rooms on the lower floor.

#### Uses 75 Tons of Ice Daily

The ice is obtained from a plant having a capacity of 50,000 tons of ice per year. The computed maximum demand for the air conditioning plant is about 90 tons per day, but with an average demand of 44 tons for about

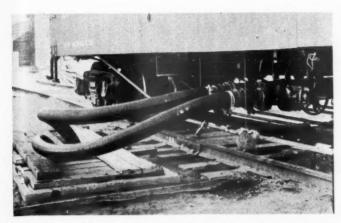
180 days of the year when outside temperatures are such as to require its operation. As a result, the air conditioning involves an added demand of about 8,000 tons of ice per year on the ice plant, which it can readily meet because of considerable reserve capacity.

In brief, the plan embraces the cooling of water by spraying it over ice and then circulating this ice water through coils in the cooling chambers of a fan-driven air circulating system, whence the cooled air is delivered to the various rooms in the building. The fans and cooling chambers were installed in an unused room on the first floor of the hotel, but the water cooling and circulating facilities were established on the opposite side of the station tracks from the building, thereby requiring the delivery of the ice water through pipes under the tracks. This was done because a primary requisite of the plan is convenience in the delivery of the ice from the ice plant to the point of use in cars, and available space for the parking of these cars.

#### Water Cooled in the Cars

To avoid rehandling of the ice, an obvious essential of the plan is the cooling of the water in the cars in which the ice is delivered. This entailed the preparation of two cars for this service (so that one car could be spotted for water cooling while the other was being loaded or in transit to or from the ice plant), and provision for two short spur tracks on which these cars are alternately parked while the water cooling is in progress. It also involved the construction of a small pump house, and a valve pit between the tracks for the convenient connection of water-circulating pipes to the cars. A third car was added later to reduce switching.

The cars are lined with two layers of 11/2-in. cork



Four-Inch Hose Lines Complete the Connection of the Ice Cars to the Circulating System

insulation, which separates the walls and floor from the sides and bottom of a tank made of  $^3\!/_6$ -in. steel plates into which the ice is charged through eight hatches in the roof. The cars are equipped also with overhead pipes and nozzles for spraying water on the ice. Connections to this spray system as well as to the drain for drawing the ice water from the car tanks are made underneath the car floor by means of special fittings for the attachment of four-inch hose lines leading from similar fittings in the valve pit between the tracks. Thus, water from the pump house is delivered to the spray-outlets over the ice, and returned to the pump house by gravity. The third car is equipped with baffles that divide it into sections for circulating of water over the ice, and compares favorably in operation with the other two cars equipped with sprays.

The pump house end of the circuit is a steel tank 8 ft. deep and 12 ft. by 6 ft. in plan, that is enclosed in a concrete box that is lined with cork insulation and provided with an insulated cover. This tank is divided midway of its length by a steel plate partition with a hole two-foot square in it. Thus, this partition permits circulation between the end where the water from the ice car enters it and the end where the return line from the air cooling coils in the hotel discharges into it. However, it does afford sufficient separation to maintain a considerable differential in temperature in the two halves of the tank.

An entirely independent circuit is provided for the delivery of the water from this vat to the air cooling facilities in the hotel and its return. In this circuit another pump with two suction lines, one from the cold end and the other from the warm end of the tank, delivers water to the coils in the air cooling chambers in the hotel and returns it to the warm end of the tank.

Both pumps are of the centrifugal type, that for the ice car-pump house circuit being operated by a 10-hp. motor and the other by a 15-hp. motor. As previously stated, the two circuits are normally independent, but the piping has been so arranged that the return flow from the air cooling coils can be discharged directly into the ice car, and either pump can deliver water from the tank to the cooling coils.

#### Temperature Changes

Water is delivered from the ice cars to the tank in the pump house at about 43 deg. F., while the flow of water through the two suction lines to the pumps that delivers water to the cooling coils is controlled by a motor-operated valve that is thermostatically regulated so that the mixed water from the two ends of the tank

has a temperature of 49 deg. F. As a result of the heat taken up while circulating through the air cooling coils, the temperature of this water is raised about 6 or 7 deg. so that the water is returned to the vat at about 56 deg. F.

The pipe lines are six inches in diameter; those in the pump house and from the latter to the valve box are steel, while the lines from the pump house to the hotel are Transite. Where placed underground, the two pipes were laid side by side, enclosed in one inch of hair felt over asbestos paper, wrapped in weather-tight paper and sealed. The entire assembly was then encased in an 18-in. split galvanized iron corrugated pipe. Similar protection was applied above ground, except that two inches of hair felt was used, with a canvas deck covering in lieu of the corrugated pipe.

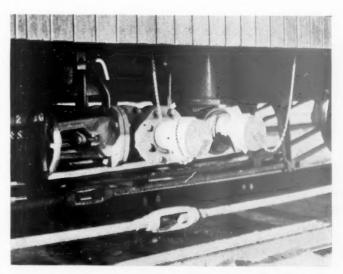
#### Air Cooling Facilities

Independent air cooling and circulating systems were provided for the air conditioning of the upper and lower floors of the hotel. As the one for the upper floor is larger and was constructed first hand, whereas that for the lower floor represents the result of the conversion of an old system, only the former will be described in any detail, the same general plan being applied in both installations.

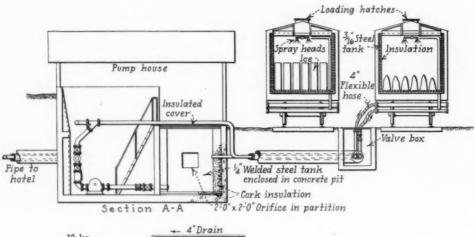
A noteworthy feature of the design is the precooling of the air with well water from the locomotive boiler supply. Both the well water and ice water are conducted through coils that are enclosed in a cooling chamber 9 ft. wide by 10 ft. high. These coils are made of ¾-in. pipe fashioned by U-bends into grids with 6-in. pipe centers, these grids, also at 6-in. centers, occupying the cooling chamber for a length of 15 ft. and containing, in all, about a mile of pipe. The pipe coils are divided into five units of equal size, two for the well water and three for the ice water.

#### Thermostatic Control

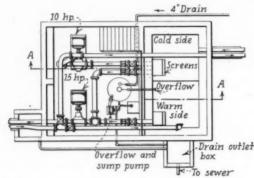
The circulation through the well water coils is continuous. The water is delivered at about 70 deg. F. and absorbs enough heat from the air to raise its temperature to about 73 deg. The circulation through the ice water coils is controlled by thermostats in the rooms to maintain a room temperature of about 80 deg. F. In addition, the circulation is controlled by a thermostat



Hose Connections Are Provided on Both Sides of the Car, Being Closed with Caps on the Side Not in Use



Sketch of the Ice Water Circulating System



in the air delivery duct set at 65 deg. F. for the purpose of maintaining the relative humidity in the rooms at about 45 per cent. The bottom of the cooling chamber is pitched to carry condensate to a drain equipped with an air trap.

The installation for the upper floor of the hotel is equipped with a fan having a capacity of 30,000 cu. ft. of air per min., while the one for the lower floor has a capacity of 12,000 cu. ft. The total water circulation amounts to about 400 gal. per min. of ice water and 250 gal. per min. of well water.

The system makes no provision for recirculation of the air, all air being drawn from the outside through cloth air filters of the washable type, that are equipped with auto-curtain buttons for ready application and removal. Air circulation in the rooms on the lower floor was provided by the existing ducts, except as they had to be modified to eliminate the return feature embodied in the original system, but an entirely new system had to be installed for the upper floor air conditioning.

To this end a false ceiling was installed in the upstairs corridor at the level of the transom bars, so that the space above the false ceiling could serve as a duct and the transoms as air outlets into the rooms. The old ceiling was insulated with 2 in. of rock wool, while the false ceiling was constructed of Thermax, about 1½ in. thick, supported on steel angles that span the width of the corridor. Wire netting hung from the underside of these angles provided the support for plaster.

A sheet metal duct was extended from the air cooling chamber to this duct over the corridor at about the mid point of its length, whence the air moves toward the two ends of the building through the latter duct.

The transoms were replaced by adjustable grilles so that the area of the air outlets into the various rooms could be varied by trial until a balanced distribution of the air was obtained throughout the entire system. Holes were cut in the bottom panels of the doors for the insertion of louvres for the release of the air from the

rooms into the corridor, whence it escapes to the outside through screened openings in balcony doors at the two ends of the corridor.

This air conditioning system was developed by George L. Davenport, engineer of water service, Atchison, Topeka & Santa Fe, Coast lines, under the direction of M. C. Blanchard, chief engineer Coast lines, and in collaboration with F. A. Maginnis, manager of ice plants. The entire installation work inside the building was done under contract by the Rapp Heater Company, New York, while the pump house, pipe lines and other outside facilities were built by company forces.



Photo by John C. Alden

A Boston & Maine Manifest Rounds a Curve at Andover, N. H.



Draperies, Venetian Blinds, and New Furniture Have Completely Changed the Interior Appearance

# Nickel Plate Modernizes Diner

Air conditioning, Venetian blinds and drapes, with redecorated walls, completely change interior

■HE Nickel Plate has recently modernized diner No. 108, one of a lot of three cars built in 1930 and originally finished on the interior in a dark walnut colonial design. In keeping with the modern trend and because of the nature of the original interior architecture of this car, the railroad, in conjunction with Interior Decorator Mehler of the Higbee Company, Cleveland, Ohio, decided to redecorate and refinish the interior following what might be termed a classic modern-period design.

The car was first air conditioned through the application of the direct mechanical-compressor type air-conditioning system, with a single unit providing a yeararound uniform temperature. The air is distributed through the car by an inside center duct running the full length of inside dining compartment, the chief thought in mind, both through the installation of air conditioning and the decorative scheme, being to provide the utmost of comfort in travel through the elimination of dirt, soot and noise and to provide a uniform temperature through the various seasons.

One of the illustrations shows the interior finish before modernization, while the other shows the interior after modernization. The new interior is somewhat of a departure from the usual dining-car design, but was thought highly desirable in view of the type of clerestory and with the inside air-conditioning duct.

The inside walls are finished in a soft blue-green or aquamarine color, and the clerestory in a lemon yellow, this color being also used on the Spanish-grain leather

upholstery on the seats and backs of the dining chairs, the frames of which are black.

A new type of natural-finish aluminum-slat Venetian blind, mounted across each pair of windows, has been installed, the vertical tapes being yellow to match the clerestory and upholstery, while the pull cords are black. All possible noise and action in the blinds is eliminated by hold-down brackets mounted at the bottom slat of each blind and sponge-rubber nosings at three points



Interior of the Nickel Plate Diner as Originally Equipped

running from the top to the bottom of each blind. The blinds are arranged for raising or lowering, may be tilted to any desired angle or closed entirely, or drawn up into a drapery cornice box, being entirely hidden from sight.

The drapery arrangement is carried out in hammered antique satin in a slightly deeper tone of aquamarine than the walls. The drapes are made in the shape of a draped swag nine inches deep across the top of each pair of windows, tabs falling from either side of the swags to the sill in soft tailored folds. The Venetian blinds are mounted under this cornice at the top. The floor is covered with a special design chevron pattern carpet in an alternate weave of clipped- and looped-pile wool yarns, and is a blue-green tone blending with the side walls and the drape fabric color.

A Greek-key frieze decoration, in keeping with the classic modern-period design, is provided around the entire car directly below the clerestory in a soft gray-green and white color. The lamp shades on the side-wall fixtures are egg-shell parchment decorated in blue-green with a profile of a Roman warrior in helmet and arrow. In regular spaces on the lower part of the clerestory, crossed classic arrows have been painted in coral-rose color with a pencil outline of black. Between each group of windows, running from the window sills to the bottom of the frieze, fluted doric columns have been inserted in gray, black and white.

Entirely new dining service of special design of clear white porcelain with a Greek-key border on the edge of all pieces in black and blue-green has been provided.

This car has been in operation on the Nickel Plate, running between Buffalo and Chicago in trains No. 7 and No. 8.

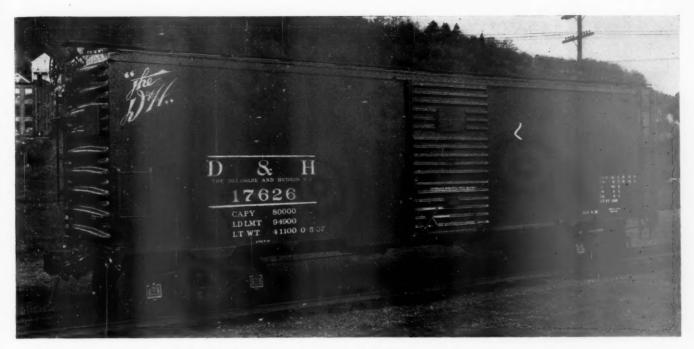
# Principles Proposed For System Accounts

HE Bureau of Statistics of the Interstate Commerce Commission has made public for discussion and criticism a monograph outlining tentative general principles to be followed in the preparation of system consolidated accounts and statistics by railroads. The treatise is the work of Dr. W. H. S. Stevens, assistant director of the bureau, and is fully documented with references to the accounting authorities from whose opinions conclusions have been drawn. Dr. Stevens does not favor the substitution of consolidated reports for those of constituent companies, but believes that they should be supplementary thereto. Moreover, he urges that such reports should not be confined to financial statements alone, but should include statistics as well, but it is conceded that a start might first be made with the financial statements alone. Conclusions of the report are summarized as follows:

- 1. A system consolidated report is essentially a statistical combination of the financial and operating data of more than one corporation designed for the presentation of the results for the group as though they were those of a single corporation or legal entity.
- 2. Consolidated reports are generally recognized as valuable and desirable because they disclose various operations and conditions which are not revealed either by the statement of the parent company or even by those of the parent and each of its subsidiaries or other member entities, but;
- 3. Although consolidated reports are useful to a full disclosure of the financial and operating results of any group of interrelated corporations, such statements also tend to conceal information regarding the companies consolidated. This infor-

mation is important not only from the standpoint of regulation but also to stockholders, banks, investors and others.

- 4. Primarily because of this situation, but partly because of various state and other requirements for reports from individual corporations, system consolidated reports for railroads should be made as supplements to and not as substitutes for the present individual road reports.
- 5. The continuation of individual company reports in addition to consolidated reports will:
- a. Do much to remove possible misinterpretations and misunderstandings of the consolidated figures.
- b. Increase the value of such consolidated reports to investors, banks, financial analysts, and others, and
- c. Make it possible to carry consolidation farther than would be practicable without individual company reports from system
- 6. The plan herein proposed to require both system and individual company reports will increase the accounting time and expense of the reports to this Commission, although this expense may gradually be reduced by further consolidation of companies or other similar changes which will reduce the number of individual company reports.
- 7. For system consolidated reports for railroads the term "system" should be defined to include all member corporations and properties constituting an integrated or unified part of the carrier operating entity.
- 8. In principle all proprietary companies will obviously be consolidated under the definition of system just stated.
- 9. For purposes of consolidation in system reports non-carrier companies operated for the purpose of (1) creating traffic, (2) reducing costs of operation, or (3) improving facilities and service should be treated as members of the system entity.
- 10. In principle all lessor carrier and non-carrier corporations constituting a part of the system operating entity should be consolidated. Such consolidation should disregard both the length of term of the lease and the extent of control or non-control of the securities of the lessor by the lessee. Concessions from the principle will no doubt be necessary in practical application.
- 11. In principle non-lessor rail and other carriers and non-lessor non-carriers operated as an integral part of the system entity should also be consolidated without reference to the extent of the financial control involved. Some modifications of general or particular application will probably be required in actual practice.
- 12. In principle holding companies should be consolidated where the subsidiaries are operated as an integral part of the railroad system. Adjustments will be necessary in the practical application of this principle where some subsidiaries are operated as a part of the system and others not.
- 13. System consolidated reports might conceivably be confined to balance sheet, income, and profit and loss data, omitting other operating and financial statistics. The obvious objection to this type of system report is an inability to interpret the financial results in terms of the operating figures except where there are only minor differences in the extent of the corporate and system properties. With regard to operating statistics, therefore, the general principle should be that all statistical as well as financial data will be consolidated for all companies included in the system report.
- A possible qualification is that it might be desirable initially to make the system reports only for financial statements. Since under the proposed plan the existing road reports, both financial and statistical, would be continued, this would impose a minimum burden of work upon the companies for the present. This, however, would contemplate that ultimately consolidation according to the general principle stated would be made so far as practicable.
- 14. Whether the Commission should require current reports from the carriers on a consolidated basis is rather, perhaps, a question of policy than of principle with qualifications depending upon the necessity of such current reports in addition to those of the individual roads for regulatory purposes. Such current system reports, if rendered, would presumably be made upon the same basis and would follow the same general principles as those already stated.
- 15. Jointly operated properties should not be consolidated, but this does not apply to jointly owned properties where the property is operated as a part of a system of one of the owners.



All-Welded 40-Ton Box Car Weighing 41,100 Lb. with a Load Capacity of 94,900 Lb.

# The D. & H. Builds Lightweight Welded Freight Cars

One experimental hopper car and 100 box cars all of 40-tons capacity built partially of alloy steels—Reduction in tare weight increases capacity to that of 50-ton cars

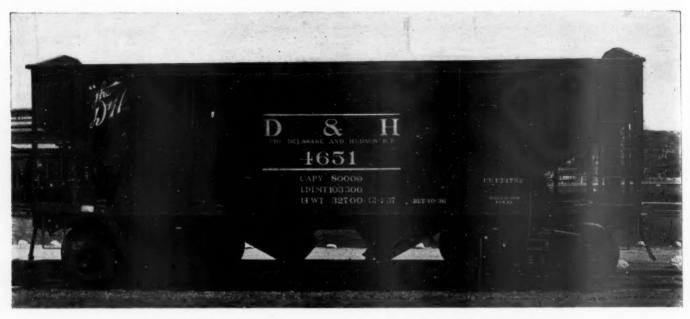
TN November, 1936, the Delaware & Hudson placed in service an all-welded self-clearing hopper car of 40-ton nominal capacity with a tare weight of 32,700 lb., this lightweight being the result of welded construction, the use of lightweight alloy steels, and unusual design features as well as the use of integral-type cast-steel trucks with 5-in. by 9-in. journals. The capacity of the car is 1,752 cu. ft. when level full at the side sheets and 1,981 cu. ft. when loaded with a 10-in. uniform heap of Although the car is stenciled 80,000 lb. capacity, it is capable of carrying 103,300 lb., this being the weight after 32,700 lb., the tare weight, is deducted from 136,-600 lb., the A.A.R. permissible total weight on the rails for a car with 5-in. by 9-in. journals. However, when carrying anthracite coal, the service for which the car is intended, it will have a maximum load of 103,012 lb. when head loaded to 1,981 cu. ft. Loaded thus with anthracite coal the car weighs 135,712 lb. or (136,600-135,712) 888 lb. less than that permitted under A.A.R. rules for a car with 5-in. by 9-in. journals. Thus, by reducing the tare weight of the car with this cubical capacity, a maximum load of over 50 tons has been attained—a ratio of pay load to gross load of 75.9 per cent. The ratio of pay load to tare weight is 3.17 to 1. The design of the car is experimental, but its performance to date has proved its serviceability with the result that

the D. & H. will probably adopt its design as standard for future construction of similar cars.

As stated previously the reduction in tare weight was made possible through the use of alloy steels, welding fabrication instead of riveting, and unusual design features. One of these features is the elimination of usual



Self-Clearing Construction Features of the Hopper Car



All-Welded 40-Ton Hopper Car with a Capacity of 103,300 Lb., Which Weighs 32,700 Lb.

type of body bolster which is replaced by an 18-in. Ibeam weighing 31.3 lb. per ft. placed on top of the center sills. Side-bearing supports built up of U. S. S. Man-Ten steel plates are welded to this I-beam and are braced from the bottom of the center sill; the bearing surface is composed of a 3/8-in. spring-steel plate. The top flange of the I-beam is bent close to the web to an angle of 30 deg. to act as the main support of the end slope sheets. Another feature of the design is the inside integral V-shaped side posts; the V is formed at one end of each side sheet, and when the sides were welded along the top of the V and at the outside of the overlapping sheet, this formed the integral inside posts.

The center sills are formed of two A.A.R. Z-sections of U. S. S. Man-Ten steel joined by continuous welding at the junction of the two flanges. The body-bolster parts, cross bearers and floor stiffeners are also of the same material electrically welded. The slope and hopper sheets at the A end of the car are of Yoloy steel while those at the B end are of U. S. S. Cor-Ten steel. The side sheets, however, are of conventional carbon steel.

It has been the experience of the D. & H. that the

Structural Features of I-Beam Body Bolster with Flange Bent to Support Slope Sheet

side sheets of all-steel hopper cars have an average life of 17 years, whereas the slope and hopper sheets last about 12 years. From a car maintenance point of view it would be ideal to renew these major parts at one shopping, and therefore one of the objectives sought with this car is to extend the life of the parts that failed in 12 years and establish a comparable service life for all

Table I-Principal Proportions of the 40-Ton Hopper Car

Length inside, ft. and in	28- 0
Length over striking castings, ft. and in	28-111/2
Truck centers, ft. and in	18-111/2
Width inside, ft. and in	10- 45/8
Height from rails at side sheets, ft. and in	10- 35/8
Capacity, level full at side sheets, cu. ft	1,752
Capacity, with 10-in. uniform heap load, cu. ft	1,981
	32,700
Ratio of pay load to gross load, per cent	75.9

major sections. In furtherance of that end, the hopper unit is strengthened by the application of Wine cast-steel hopper frames, cast-steel doors and door locks.

Other items of interest on this car are the AB type brake equipment and Ajax power hand brakes. A significant feature of the car is the relatively few parts used in its construction; there are only 1,153 parts, of which 601 are bolts, nuts and rivets, as compared with 3,596 parts in the conventional hopper car of this capacity. The use of welded, instead of riveted, construction is responsible for most of the saving since there are only 277 rivets in the entire car as compared with 2,576 in the U. S. R. A. 40-ton hopper car.

The D. & H. has experienced considerable demand from the anthracite coal fields for a car with twin hoppers and having a capacity of 50 tons. This experimental car has therefore been favorably received since it has the required capacity and is entirely self-clearing with the hopper spacing so arranged as to effect unloading in one spotting of the car. The principal proportions of the car are given in Table I.

I PM E e s I

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The truck side frames are the American Steel Foundries and Adirondack Steel Company with 5-in. by 9-in. journals and, with journal boxes cast integral, there is a saving in weight as compared with side frames and

(Continued on page 168)

# Would Regulate Forwarders

I. C. C. lawyers urge attempt be made under existing laws, to be supplemented later if necessary

WASHINGTON, D. C.

HARGING that the forwarder companies are being used as a "device" by the railroads to cut freight rates below the standard set by the Interstate Commerce Commission, William J. Walsh and Glenwood W. Rouse, counsel for the commission, on July 31, submitted a voluminous brief to the commission in which they went into great detail to analyze the make-up and operations of such forwarders as Universal Carloading & Distributing Company, National Carloading Corporation and the General Carloading Corporation and concluded that it would be in the public interest for the commission to attempt to regulate them, and if it finds that it does not have the power to do so, that it should ask the Congress for the proper authority.

The information which is contained in the brief was obtained by the commission in a series of hearings which were held in New York, Chicago, St. Louis, Dallas, Portland, Oregon, and San Francisco. During the hearings counsel for the commission called to the witness stand the principal traffic and operating officers of most of the respondent carriers which transport any

substantial amount of forwarder traffic.

#### Three Companies Have Most of Business

Although the brief estimates that there are about 30 concerns in the freight forwarding business, yet it is pointed out that by far the greater proportion of the total business is done by three companies and their subsidiaries. These three companies are the Universal Carloading & Distributing Company, the National Carloading Corporation and the Acme Fast Freight, Inc. The gross business of these concerns during 1936 was

in the neighborhood of \$100,000,000.

The business of the forwarder is concerned primarily with the assembling into carload lots of numerous shipments of merchandise from individual consignors. It tenders the shipments to the railroad company as a carload of mixed merchandise and pays the carload rate. At the destination it distributes the individual consignments to the ultimate consignees for whom they are intended. .The forwarder's profit arises out of the spread between the less-than-carload and carload rates. The type of forwarder considered in the brief usually has no proprietary interest in the shipped goods and is interested solely in profit, according to the brief.

The brief charges that the Universal Carloading & Distributing Company is owned and controlled by the New York Central; that the National Carloading Corporation is owned and controlled by the Erie, the Pere Marquette and the Chesapeake & Ohio, and that the Baltimore & Ohio has a substantial interest in the General Carloading Corporation. The brief goes on to state that the record shows that the Acme Fast Freight,

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Inc., is a privately owned corporation.

In discussing the relationship of the New York Central to the Universal company, the brief points out that of the \$22,500,000 paid out by Universal to all roads, the New York Central received \$9,250,000. The next railroad, from the standpoint of freight charges paid

to it by Universal, was the Union Pacific, which handled 7,400 cars and collected approximately \$2,250,000 in freight charges.

#### Says N. Y. C. Dominates Universal

"While there has been an obvious attempt," the brief says, "by the use of holding companies and subsidiary corporations, to keep the legal ownership of the forwarding company stock out of the direct hands of the New York Central, it is apparent that the arrangement and the conduct described of record amount to nothing less than domination and control of United States Freight Company, its subsidiary, Universal Carloading & Distributing Company, and other affiliates by the New York Central. Linden Securities Corporation appears to be nothing more than a dummy, formed for the express purpose of holding this stock and owning no other securities whatever and transacting no other business. At the time of the last hearing, April 26, 1937, United States Freight Company stock had a market value of only \$23.50 per share. At this price, the stock pledged as collateral had a value of approximately three and a half million dollars, whereas the debt which Linden owed the Securities Corporation of the New York Central was nearly fifteen million dollars. Obviously, if this were a bona fide relationship of debtor and creditor, the Securities Corporation would have long since demanded and received collateral sufficient adequately to secure this obligation. During 1935 the Securities Corporation received as interest on its loan of fifteen million dollars a little over two hundred thousand dollars, represented by the dividends of United States Freight Company which included \$1 a share regular dividend and 25 cents a share extra dividend. This represents a return of about 1.33 per cent which is surely far below the ordinary commercial rates for loans of this type.

The Supreme Court has held in numerous cases that it will not permit itself to be blinded or deceived by mere forms of law, but, regardless of corporate fiction will deal with the substance of the transaction involved as if

the corporate agency did not exist.

In our opinion, the record justifies a finding that Universal Carloading & Distributing Company is owned and controlled by the New York Central, and is in effect a department of the railroad devoted to the solicitation, consolidation and delivery of merchandise freight.'

#### **All-Commodity Rates Favor Forwarders**

The brief reviews the subject of all-commodity rates and points out that they began to make their appearance in 1932. It alleges that there is no uniformity as to the level of the all-commodity rates in different territories or between different points. "Generally speaking," it says, "the rates between Trunk Line and C.F.A. Territories are on a third class basis, but within the territories there are numerous all-commodity rates as low as 5th and even 6th class. The evidence or record demonstrates that while forwarders are not the only shippers who use the all-commodity rates they are by far the largest users."

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The brief summarizes this situation by saying that "We have, then, a situation where the respondent railroads, by the rate structure which they have set up, have favored the development of the freight forwarders, and have made it advantageous for shippers to deal with the forwarder rather than with the railroad direct in order to effect savings in transportation costs. The shipper with a private siding is prevented from using the allcommodity rates unless he goes to the expense of trucking his freight to the railroad station or team track. The forwarders, located as they are in railroad freight houses, contend that tracks serving their facilities are of course not private sidings and they can ship mixed carloads from their places of business at a low all-commodity rate, while another shipper, offering a similar mixed shipment loaded on his private siding, can not obtain the benefit of the all-commodity rate.'

#### Non-Compensatory Charges for Service to Forwarders

A detailed account is given of how the railroads permit the forwarder companies to use their property for very small rentals which, in many cases, do not even come close to paying the actual cost of maintaining the property. Counsel for the commission charge that the railroads charge these ridiculously low rentals only in order to encourage the forwarding companies to use their facilities. "It is our view," the brief reads, "that the practice of permitting freight forwarders to use railroad freight house platforms for the unloading, sorting and distribution of their traffic without any compensation therefor is a preference and advantage to the forwarders and violates Section 3 of the Interstate Commerce Act."

The carriers are severely criticized by the commission lawyers for making leases to forwarders at very low rentals, and the brief states that the Courts have held that where a carrier leases surplus property to a shipper the rental obtained under the lease must be at least equal to the fair market rental of the property. On this point the brief reaches the conclusion that "the record justifies a finding that certain of the respondent carriers. including those specifically mentioned heretofore, have violated Sections 2, 3 and 6 of the Act in granting noncompensatory leases to the forwarders, in that they have diminished their published rates through such inadequate rentals and have granted preferences to the forwarders. The record further shows that in the leasing of storage space the respondents have also violated the sections of the Act namely by providing the storage space at monthly rates rather than at the published tariff rates.

The brief also condemns the practice of railroads unloading the traffic of forwarders for an amount which is less than the cost of the service. Counsel for the commission believe that the failure of the carriers to make a charge which is approximately equal to the expense incurred discriminates against traffic not given this service and is unreasonable.

Regarding the practices of railroads in granting exceedingly liberal stop-off privileges to forwarder companies, the lawyers for the commission say that it is their belief that "practices under the stop-off tariffs have been carried to an unreasonable length, under the guise of the carriers convenience, and as the operation is now conducted have provided a service which is preferential to forwarders and discriminatory to other shippers." The brief also states that for a time "most of the lines between Chicago and the Twin Cities engaged in a speed war incited principally by competition for the forwarders' traffic." The brief also mentions the increased use of passenger equipment to speed up train schedules for forwarder traffic.

#### Pooling L. C. L. May Be in Public Interest

The brief concludes by stating that "there is testimony in the record which would give a basis for a conclusion that some form of consolidation and concentration of l.c.l. freight into carloads for movement over the rail lines would be in the public interest. Certain of the railroads take the view that there is no necessity for the intervention of a third party in effecting such concentration, and that the railroads by appropriate changes in their practices could directly effect the result desired. These appear to be questions of managerial policy which the railroads must ultimately settle for themselves. The commission's function is to see that the laws presently applicable are enforced."

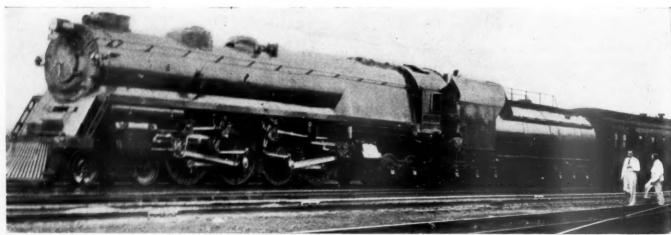
The lawyers feel that there is a sufficient community of interest between the New York Central and the Universal Company and between the Erie, Pere Marquette and the Chesapeake & Ohio and the National Carloading Corporation to make them one and the same thing and therefore subject to regulation by the commission. "The conclusion is warranted," says the brief, "that these forwarders can be considered in no light other than the alter ego of the parent railway companies."

The brief is concluded with the statement of the philosophy of the authors which is that "if the forwarder remains as an important factor in the national transportation scheme, there can be no quarrel with the proposition that the public interest requires that its charges and services should be regulated."

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Thoto by R. W. Carlson

The B. & O. "George H. Emerson" in Test Road Service at Garrett, Ind.

# Roads Told to Reduce Debts

Study made for institutional investors suggests they make retirement policy a prerequisite for further loans

MPORTANT institutional investors in railroad securities are sponsors of a study of railroad financing, issued this week, which holds that railroads could have reduced their debt during the past 50 years by approximately one-third without appreciable sacrifice to stockholders; and that greater provision for the retirement of debt "would be expedient in future railroad financial policy." The study is entitled "Railroad Debt Reduction," with a sub-title: "Outline of a plan for the gradual reduction of railroad debt, tested by application to the financial history of three bankrupt railroads." The author is Irvin Bussing, Ph.D., economist for the Savings Bank Trust Company, New York, which latter institution is the publisher.\* The monograph contains a foreword by Henry Bruère, president of the Bowery Savings Bank, and a leading spokesman of institutional investors in railroad securities, who expresses the hope that the study will "afford an aid in developing a policy of railway debt reduction effective during periods when earnings make such amortization possible.

#### Theories Tried Out on Three Roads

Having determined that the railroads could have reduced their long-term debt in the past, the study favors such reduction for the future; and suggests that institutional bond buyers "and others who are in a position to influence corporate financial policy" might consider debt reduction more seriously than they have in the past. The theories of debt reduction which the author works out, he tests by applying them to three bankrupt railroads, to see what their corporate history might have been, if their debt had been so reduced. These roads are the North Western, the Rock Island and the Milwaukee.

The analysis bases its contention in behalf of debt reduction primarily on the obsolescence which is bound to arise in an "increasingly dynamic society such as ours"; in which no industry can hope for permanent safety. No industry can expect that its earning capacity will continue indefinitely; hence perpetual debts, which are not paid at maturity, do not fit into the modern scheme. Every industry has a life span like that of an individual, showing the characteristics of youth, maturity and old age; and a financial policy suitable to one stage may be unwise in a later one. Adaptation of industry to change is normal; and adjustment of financial policy to change is a logical and necessary part of industrial adaptation in general.

As a further argument in favor of debt reduction, it is stated that "a flexible capital structure (i.e., one not burdened too heavily with fixed charges) facilitates a flexible rate structure. During periods of industrial depression it would be highly advantageous to the country as a whole if the roads could make necessary

rate adjustments not only to meet prices of competitors but to prevent one category of prices, namely, freight rates (which affect practically all prices), from remaining disproportionately high. Where heavy fixed charges (as interest on a large bonded debt) must be met, however, rate readjustments are precarious. . . ."

As a specific instance favoring lower ratio of bonded debt, the study cites the British railways, with less than 29 per cent of total capital in the form of fixed interest obligations, as contrasted with 62 per cent by the American railways, and draws atention to the fact that "financial failure is practically unknown among British railways, whereas almost every American road has been reorganized at least once as a result of financial failure . . ."

#### **Answering Arguments Against Debt Reduction**

Arguments against debt reduction are enumerated and answered as follows:

- 1. New money would cost too much; if bondholders would offer it at 5 per cent, stockholders would probably want 10 per cent. Ans. The question from the investor's viewpoint is one of relative safety; if earnings available to the stock investor are reasonably secure, funds would be obtainable from this source at relatively low rates.
- 2. It is a meaningless gesture to retire \$1,000,000 of bonds on the one hand, and borrow a million for new capital purposes on the other—why not let the debt stand, and simply use the \$1,000,000 retirement fund to make the necessary new capital investment? Ans. This argument does not prove that the new investment has earning power—it is better for the borrower to have to convince investors of the economic value of the proposed new expenditure.
- 3. It is poor policy to retire debt which costs only 4 or 5 per cent and thereby be forced to forego new investments which might yield much higher percentages. Ans. This argument would apply only to rigid sinking funds, which the author does not advocate.
- 4. As long as an asset has earning power, there is no necessity to wipe out its offsetting debt. Ans. Well, can there be any hope of wiping out the debt after the asset has lost its earning power?
- 5. If the investment is sound, then debt reduction simply works the creditor out of his investment and makes him look around for something else into which to put his money. Ans. This argument would apply only with respect to rigid sinking funds, which the author does not favor.

The study does not favor rigid ear-marking of retirement funds. Rather, it advocates that, in years when earnings justify, definite sums, arrived at by formulas—of which three different ones are offered—would be set aside either for the purchase of the railroad's own bonds or for the making of remunerative capital improve-

 $<sup>^*</sup>$  Issued as a 40-page booklet, 6 in. by  $8\,\%$  in., tables included, bound in paper, and priced at \$5 a copy.

ments-whichever promised the higher return. The formula particularly favored is the following:

$$A = \frac{B}{S} N$$
 (.10)

A being the annual allocation for debt reduction or improvement, B being outstanding bonds, S being outstanding stock and N being net income available for interest and dividends.

#### How Force Policy of Retiring Debt?

It is urged that the annual retirement allocation must follow interest charges, since having it precede them would infringe on existing contractual rights." Rigid sinking funds are not favored, because they may force companies to pay off bonds at a lower rate of interest while they are borrowing new funds at a higher rate. To put the plan in effect, the study suggests as alternatives that:

1. Supervision of the debt retirement program might be entrusted to the Interstate Commerce Commission; but additional regulation is questionable.

2. It might be given to corporate trustees; who, probably, would have to have a lot of accounting and technical assistance.

3. It might be left to railroad managements, who, however, might find it difficult to take action which would appear to encroach on stockholders.

4. Investment bankers could set and maintain financial standards.

5. Institutional investors by joint action could make a policy of debt reduction a prerequisite to further loans by them.

By providing the alternative of investment in improvements to retirement of outstanding obligations, the author points out that the investor would not be "worked out" of his investment, provided the industry were expanding; whereas, if it were not expanding, then he ought to be glad to be "worked out" of it. The study urges (in its own italics) that by pressing for debt reduction institutional investors can strengthen the financial structure of their debtors, improve the quality of their holdings, and increase the liquidity of their institutions.

As to what the roads as a whole might have done in the past by way of debt reduction, the study states, if in the period 1891-1933 they had set aside 1.8 billions, which would have been 1 per cent of their operating revenues, that this sum at the end of 1934, compounded annually at 4 per cent, would have aggregated 3.7 billions and would have wiped out 32 per cent of their debt. Such a policy, the author calculates, would have reduced the average dividend payments from 4.09 per cent to 3.52 per cent; but, he adds, a bond-buying policy by the roads might have reduced the average interest rate on bonds-and a saving of only .643 per cent in the bond interest rate would have fully compensated the stockholders for all the plan would have cost them.

# D. & H. Builds Lightweight Welded Freight Cars

(Continued from page 164) The wheels are 750-lb. chilled-iron larger journals. single-plate, A.A.R. standard made by the Albany Car Wheel Company. The springs are A.A.R. standard with one Frost friction unit in each spring group. Truck bolsters are of cast steel. Truck brake rigging, brake beams, brake shoes, hangers and other parts confrom to A.A.R. specifications. The car is also equipped with metal brake steps, Miner draft gears, and alloy-steel A.A.R. Type E couplers with 61/4-in. by 8-in. shank, bottom operated, furnished by the National Malleable and Steel Castings Company.

#### D. & H. 40-Ton Capacity Box Cars

The D. & H. car-building program for 1937, includes the construction of 100 all-steel box cars of 40ton nominal capacity weighing 41,100 lb. and having a cubical capacity of 3,318 cu. ft. Of this order, all of which were built in D. & H. shops and are now in service, 75 are of riveted and welded construction, 10 are of all-welded construction, and 15 are all-welded with the exception of the ends which are only partially welded to the roofs and are riveted to the sides and end sills. The sides for all the cars were prefabricated at the shops of the Greenville Steel Car Company and shipped to the D. & H. shops. The doors, with camel roller lifting fixtures, were supplied by the Youngstown Steel Car Door Company. Dreadnought steel ends were shipped to the D. & H. shops and welded there, after which all safety appliances were riveted in place. Chicago-Hutchins dry-lading roof sections were also assembled and the cap seams were riveted at the D. & H. shops.

In these cars, as in the 40-ton hopper car previously

described, high-tensile alloy steels were used for the underframe, which, together with the use of trucks with 5-in. by 9-in. journals, permitted reduction in tare weight. It was interesting to note, after the first cars were completed, that there was no appreciable difference in the tare weights of the riveted and welded cars. However, the reduction in the tare weights of both cars has permitted a design of the 40-ton car with a cubical capacity equal to or more than that of a conventional-type 50-ton capacity box car. Although the car is stenciled 80,000-

#### Table II-Principal Proportions of the 40-Ton Box Car

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Length inside, ft. and in	40-6
Length over striking castings, ft. and in	41-81/2
Truck centers, ft. and in	30-81/2
Width inside, ft. and in.	8-91/8
Height inside at eaves, ft. and in.	9-3 8/18
Height from rails, over running board, ft. and in	13-911/16
	3,318
	41,100
Ratio of pay load to gross load, per cent	69.9

lb. capacity, it is capable of carrying 94,900 lb., this being the weight after 41,400 lb., the tare weight, is deducted from the permissible total weight on rails for this type of car with 5-in. by 9-in. journals. With these weights, the car has a ratio of pay load to gross load of 69.8 per cent. The principal proportions of the car are given

A.A.R. Z-section center sills of U. S. S. Man-Ten steel continuously welded at the junction of the two flanges are employed in the construction of all the cars. All bolster webs, crossties, cross-bearer webs and the side sheets, which are 0.10 in. thick, are of copper-bearing steel. All other parts are of carbon steel.

underframes of the riveted cars consists of 1,160 pieces of which 261 are major parts and 899 are minor parts such as bolts, nuts and rivets. The superstructure of these cars consists of 3,184 pieces of which 660 are major parts and 2,524 are minor parts. The underframe of the all-welded cars consists of 646 pieces of which 263 are major parts and 383 are minor parts; the superstructure consists of 2,814 pieces of which 660 are major and 2,154 are minor. The trucks on all the cars have 282 parts, of which 168 are major items.

The trucks have American Steel Foundries and Adirondack Steel Company integral cast-steel side frames for 5-in, by 9-in, journals. The bolsters are cast steel. The wheels are 750-lb, chilled-iron single-plate conforming to A.A.R. Specifications and made by the Albany Car Wheel Company. A.A.R. springs are used with one Frost or Miner truck-spring snubber in each spring group. Foundation brake gear conforms to A.A.R.

Specifications. Truck construction includes Creco fourpoint brake-beam supports and A-Zee brake-hanger suspensions. The cars are also equipped with Kass metal brake steps, Ajax power hand brakes, Miner draft gears, and A.A.R. bottom-operated Type E couplers furnished by the National Malleable and Steel Castings Company and fitted with Union Metal Products centering devices. All cars are equipped with type AB brakes. The interior of the cars are wood lined, with the exception of the roof; however, before the cars are lined, a heavy coat of Continental cement is applied for a height of 2 ft. on the ends and sides of the interior. After lining, the wood is sand papered and the sides are sprayed with a coat of enamel and the floor is sprayed with Balcolac. outside of the roof is sprayed with two coats of Valdura after the inside and outside of the roof has been sprayed with one coat of galvanized-iron primer. All painting including stenciling, is done by the spray method.

# Communications and Books ...

The Railway Age cannot publish letters from readers who do not supply their names and addresses. Names of correspondents are not published, or disclosed even upon inquiry, unless the correspondent consents. But they must be given us as an evidence of good faith.

## "C. I. O. Tactics Of Business Men"

TO THE EDITOR:

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South Duxbury, Mass.

As one who frequently, for many years, has attempted to uphold the integrity of most business men, as compared to many who perhaps honestly thought they were of superior virtue, your above captioned article in the Railway Age of July 3 was interesting.

I am not competent to pass on the merits of the precise question of rates, whether discriminatory or otherwise, and I seek no controversy. However, I would like the opinion of those qualified to know if the protective tariff was, or is, beneficial solely to the business man, stockholders, etc., as distinguished from the so-called "working man" or "laborer," both directly and indirectly? Did the tariff provide wages by which the net income of the "workers" was increased?

If the industries were established, by reason of the tariff, was the result advantageous to the people? Please understand I address you only in the hope of having a simple answer if possible.

Duxbury and the neighboring community of Marshfield are threatened with the abandonment of railroad service. This committee was elected by the town to attempt to secure continuation of service. One of the first acts was to subscribe to the Railway Age. Another was to petition the Legislature for the right to raise by taxation and appropriate money to help defray, in whole or in part, any deficit, incurred by the operation of the railroad within the two towns. The Legislature granted our request.

Our feeling, the background of this attempt, was that if the communities wanted railroad service but could not provide sufficient traffic to pay the cost of service, then they should be willing to make up the difference. Of course, you know many factors enter into the matter of cost. To our sorrow we have found the methods adopted are beyond the comprehension of ordinary men like ourselves. See *Railway Age*, April 17, page 678, "The railway officers as well as" . . . etc.

For instance, at the hearing it was shown that notwithstanding the mildest winter for many years and the fact there was practically no snow, the cost of removal of snow was considerably increased over previous years. The explanation was

that the figures were based on a 5-year period, and while they might not be exact for the year in question, they were exact for the 5-year period. Seemingly, we were charged with much in the way of expenditures that were not applicable to the line in question.

I burden you with all this as preliminary to the question: Is it possible under conditions of today to consider the railroad a private business? If it is a public business, can we limit legislative action with respect to it?

And one more, please: Are business men, so-called, so numerous, so powerful, that they can, despite all honest, right-thinking, well-intentioned people, elect their "tools" to do their will? And are all legislators but the "tools" of some special interest?

CHARLES S. CLARK, Chairman, Duxbury Railroad Committee.

[With respect to the protective tariff, our view is that, historically, the demand for protection came first from business interests for their selfish benefit, and that its immediate result was exactly that. Later on, however, other industries and other localities received similar protection—and this increased the cost of living and hence the wage rates and material costs which the originally protected industry had to pay, thereby removing a large part of the advantage of the protection to the business interests which originally insisted upon it. Still later, because of the interference with exports of farm products which arose when tariffs became too high, the supposedly "protected" industries lost a large part of their formerly prosperous domestic market.

Furthermore, by their example, tariff-minded business men and those who support expensive highway and waterway projects have encouraged any group which can muster a few votes to descend upon our legislative bodies with similar demands for special favors. And, as this tendency has spread, the country has fewer and fewer people who make their livings by exerting effort to increase production, and more and more who are trying to get rich solely by using their political power to take something away from somebody else. When we get to the point—which we seem to be approaching rapidly—when relatively few people care anything about increasing production, and most of the population spends its time trying only to enhance the share it gets of what there is to divide, then the total production remaining to be shared is bound to suffer.

Our view is that, of all elements in the community, business ought to be the first to see the folly of using political pressure to interfere with normal processes of production and distribution; and if business—supposedly informed on such matters—cannot provide leadership true to the fundamentals, there is scant hope for expecting such leadership to issue from politicians or labor leaders.

We have no detailed knowledge of the conditions surrounding

the proposed abandonment of the railway line in which our correspondent has interested himself, but it does occur to us to inquire: If the Commonwealth of Massachusetts and local communities were collecting from the users of highways, fees sufficient not only to cover the maintenance, interest and amortization costs of roads and streets, but also a sum equivalent to taxes on the investment in the highway system (costs equivalent to those which railway rates must cover)—would motor transportation then be so attractive and so cheap by comparison that the railway would be forced to abandon its line because of inadequate patronage?

Once tariffs, subsidies and special privilege begin to be extended, there seems to be no stopping them. The railways are forced to charge rates which cover total costs of the transportation they provide (including taxes on the property they use for that purpose); and they have at the same time to compete with other agencies whose costs are paid largely out of taxes. Naturally, under such inequality of treatment, only those railway lines can survive where traffic remaining to them is sufficiently heavy to provide economies great enough to overcome the unnatural competitive handicap placed upon the railways by political authority. If people wish to see thin-traffic railway lines continued in operation, then they will have to use their votes to eliminate the competitive handicaps (including "full" crew laws) which prevent private enterprise from continuing to operate them.—Editor]

## Sees Train Limit Bill As Anti-New Deal Measure

BALTIMORE, MD.

TO THE EDITOR:

Your campaign against the Train Limit bill, which recently passed the Senate, and is now in the hands of the House Committee, is particularly gratifying. There can be no doubt that long trains enable the railroads to give the best service to the public at the least cost. Much progress has been made, but the greatest advantages of long trains are still to be realized. Better brake equipment, better draft gear, lighter cars, communication between engine and caboose by radio, and, above all, modern yards will increase the efficiency, economy, and safety of long trains. The reason why railroads have been able to compete with other more mobile, adaptable methods of transportation is that one power unit and one crew of men can move a great number of cars. To cut the length of trains, then, is to cut out the railroads' very reason for existence.

In connection with this bill, I have had correspondence with some officials of the present administration, and all my criticisms of the bill have had the same reply: that the proponents of the bill seemed to have most of the arguments and there was little answer given on the other side of the case. An inspection of the debate that took place on the Train Limit bill in the Congressional Record bears this out. The fact of the matter is that the railroads have been "laying down on the job." The type of opposition tactics that have been used so far are no good whatsoever. Letters to stockholders, sent with the annual reports, bring little pressure to bear. If not overlooked entirely, they are in the hands of a group who has consistently opposed the administration and has little confidence in it. Educational information on the harmful effects of such legislation has been distributed to railroad employees in a desultory fashion by offi-cials who doubt most of the data themselves. There has been no active attack on the true fallacy of the bill. There is no place for a train limit bill in a planned economy.

Along with all other industries, the railroads and their spokesmen have consistently opposed the "so called reforms" of the New Deal. Again and again Railway Age (the majority of whose readers are operating men with interests not opposed to labor) has criticised editorially the very measures which have given the administration its great popular support. The fight against the Train Limit bill has just been thrown in with all the rest. With R.F.C. loans, with lower fares, with regulation of trucks, and with crossing eliminations, the government has tried to help the railroads to compete with other agencies of

transportation. If the bill passes this year or any other year, it will be because the Congress and President honestly believe that it is a safety measure, and one which will enable the railroads better to compete with trucks. If short trains will not accomplish these ends, we must prove it, for a measure to impair the efficiency of our countrys transportation system would have no place even in a socialist system, and certainly none in the modified planned economy of the New Deal.

ALEXANDER G. GRANT, JR.

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#### New Books

Pederal Commissioners: A Study of Their Careers and Qualifications, by E. Pendleton Herring. 151 pages. 9 in. by 6 in. Bound in cloth. Published by the Harvard University Press, Cambridge, Mass. Price \$1.50.

Written chiefly to acquaint the public with the backgrounds of the staffs of our more important federal trade, financial and industrial commissioners, this treatise sets forth in detail general conclusions on personality traits, career and educational backgrounds, political "pasts," and degree of efficiency as public servants, based on the study of 143 federal commissioners, which includes all the members of all the commissions considered from their formation up to the status of January, 1935. As a pioneer body and the group that has evoked the greatest volume of criticism, fair and foul, the Interstate Commerce Commission constitutes the piece de resistance and pivot-point of the discussion, and the more famous of its past and present staff, as, for example, Commissioners Cooley, Splawn, and Eastman, serve as "guinea pigs" for an evaluation of the typical governmental high priest.

In analyzing the choice of commissioners that has been made, Mr. Herring concludes that neither Congress nor the President has created a satisfactory measuring rod for appointments and that the qualifications sought have been varied and vague. Nevertheless, he admits that "in general the statutory requirements reflect the desire of Congress to maintain commissions that are not identified with any one class, party or section," and asserts that, in fact, direct scrutiny of candidates for appointment at congressional committee meetings has provided a more flexible and expert method of selection than the establishment of hard and fast requirements by statute. Speaking of educational and professional background, he claims that, in most cases, good men have been appointed at an age too advanced to render complete service; that business men have been loath to enter federal service because of low financial return and uncertainty of reappointment; that, therefore, the majority of commissioners have been professional men, chiefly lawyers and academicians; and that there is a sad lack of provision for the proper training of future commissioners through employment in lower branches of the governmental service, as obtains in Great Britain.

Since the calibre of men sitting in the judgment seats of the Interstate Commerce Commission imports so much for the future of American railroading, a study of this sprightly and definitive analysis will bring its own reward.

Engineering Report on Air Conditioning of Railroad Passenger Cars. Prepared by the Division of Equipment Research, Association of American Railroads, 59 East Van Buren street, Chicago. 316 pages. Price to member roads of A.A.R., \$1.50: to others. \$3.

The Summary Report on air-conditioning issued on November 24, 1936, dealt with those factors of air-conditioning railroad passenger cars of direct concern to the railroad executive. The Engineering Report, the second of the series, is designed to meet the needs of the air-conditioning engineer and railroad operating personnel. In it the results of laboratory tests and of road performance tests of cars are presented in four parts: Part I—Tests of Air-Conditioning Systems; Part II—Tests of Drive Mechanisms; Part III—Hot-Room Tests of Air-Conditioned Cars, and Part IV—Road Performance of Air-Conditioned Cars. The subject of costs is not dealt with in the Engineering Report, but is discussed in detail in Part V of the Summary Report.

# NEWS

### Income Bonds in Western Pac. Plan

Bureau of finance proposes type of security supposedly not favored by I.C.C.

The Bureau of Finance of the Interstate Commerce Commission, on August 2, submitted to the commission a proposed report on the Bureau's proposed plan of reorganization of the Western Pacific. The proposed plan, the first one to be announced by the Bureau for a Class I carrier, takes on added significance when it is noted that it contains a provision for the issuance of income bonds. This announcement would alter a frequently announced commission stand of being "arbitrarily" and "academically" opposed to the principle of income bonds. Although the proposed report has no force until adopted by the commission, yet the Bureau's views are generally considered to be similar to those of the com-The proposed plan would scale mission. down the fixed charges to a much greater degree than has hitherto been proposed in an effort to make the road as depression proof as possible.

The essential provisions of the Bureau's plan of reorganization would be as fol-

lows:

1. The immediate issue by the reorganized company of \$10,000,000 principal amount of 30-year first mortgage 4 percent bonds, \$19,716,040 principal amount of 50-year income mortgage 4 percent bonds, \$29,574,060 par value of noncumulative 5 percent preferred stock (\$100 par value a share), and \$30,068,220 par value of common stock (\$100 par value a share). The debtor's existing equipment obligation would be assumed by the reorganized company

pany.

2. The sale of the \$10,000,000 principal amount of new first mortgage bonds, the purchasers to receive 10 shares of the new common stock for each \$1,000 principal amount of first mortgage bonds purchased.

3. The creation and maintenance of a capital fund of not to exceed \$500,000 in any one year or \$1,000,000 at any time, to be accumulated out of available net income remaining after payment of fixed charges.

4. The creation and maintenance of a one-half of 1 percent sinking fund for the retirement of the new income bonds out of available net income remaining after the payment of fixed charges, payments into the capital fund, and payment of interest on the new income bonds.

5. The holders of the debtor's existing first mortgage bonds to subscribe for the purchase of the new first mortgage bonds.

6. The Reconstruction Finance Corporation, Railroad Credit Corporation and A. C. James Company, holders of the debtor's notes which are secured by the pledge of the debtor's general mortgage bonds, to receive in exchange therefor and for accrued unpaid interest thereon, \$11,853,454 par value of new common stock, the stock to be distributed among them on the basis of the general mortgage bonds held by each creditor, and contingent rights to subscribe for the purchase of the new first mortgage bonds.

7. The Western Pacific Railroad Corporation, an unsecured creditor to receive in exchange therefor subscription warrants

# N.R.O.I. Up 25% For Six Months

2.76 per cent return compares with \$238,016,427 or 2.22 per cent in 1936

Class I railroads in the first six months of 1937 had a net railway operating income of \$297,341,777 which was at the annual rate of return of 2.76 per cent on their property investment, according to the Bureau of Railway Economics of the

#### Class I Railroads—United States

Month of Jo	une		
Total operating revenues Total operating expenses Taxes Net railway operating income Operating ratio—per cent Rate of return on property investment—per cent	1937 \$351,703,689 265,578,652 16,507,517 58,939,875 75.51 2,82	1936 \$330,620,688 241,764,770 26,877,555 50,258,671 73,12 2,42	1930 \$439,377,179 330,732,585 30,580,933 67,683,471 75,27 3,27
Total operating revenues Total operating expenses Taxes Net railway operating income Operating ratio—per cent Rate of return on property investment—per cent	# June 30 1937 \$2,087,270,436 1,558,917,990 166,123,163 297,341,777 74.69 2.76	1936 \$1,872,580,143 1,421,083,806 148,875,849 238,016,427 75.89 2.22	1930 \$2,658,254,307 2,048,678,522 177,366,289 369,416,251 77.07 3.46

for the purchase at par of the new first mortgage bonds to be sold.

8. The formation of a committee with such power as may be necessary to carry out the plan, and to determine, subject to the approval of the Commission, the form and provisions of the indentures, bonds, stock certificates and other instruments in connection with the carrying out of the plan; the committee to consist of three members, one member to be named by the bondholders' committee, one by the Reconstruction Finance Corporation, Railroad Credit Corporation and A. C. James Company as a group, and one by the Western Pacific Railroad Corporation.

9. The plan to be accepted and carried out in accordance with its terms and provisions of section 77 of the Bankruptcy

10. The obligations of the debter not specifically provided for to be paid by the debter or the reorganized company or the assumed by the reorganized company.

11. The plan should be effective as of January 1, 1937.

#### Superintendents' Next Meeting

At a meeting on July 20 of the officers of the American Association of Railroad Superintendents in Chicago June 7-9, 1938, was selected as the date for the next annual convention. The Hotel Stevens, Chicago, was chosen as convention headquarters.

Association of American Railroads and made public on July 29. In the first six months of 1936, their net railway operating income was \$238,016,427 or 2.22 per cent on their property investment, and in the first six months of 1930 was \$369,416,-251 or 3.46 per cent.

Gross for the first six months of 1937 totaled \$2,087,270,436 compared with \$1,-872,580,143 for the same period in 1936, and \$2,658,254,307 for the same period in 1930, an increase of 11.5 per cent over 1936, but 21.5 per cent below 1930. Operating expenses for the six months amounted to \$1,558,917,990 compared with \$1,-421,083,806 in 1936, and \$2,048,678,522 in 1930—9.7 per cent above the former, but 23.9 per cent below 1930.

Class I roads in the first half of this year paid \$166,123,163 in taxes compared with \$148,875,849 in the same period in 1936, and \$177,366,289 in 1930. The June tax bill amounted to \$16,507,517, a decrease of \$10,370,038 or 38.6 per cent below June, 1936. This was due to adjustments by some carriers crediting their tax accounts with payroll taxes set up in 1936 under the Railroad Retirement Act of 1935. That act was recently amended to repeal the tax for the period from March 1 to December 31, 1936. Nineteen Class I roads failed to earn expenses and taxes in the first six months of 1937, of which seven were in the Eastern district, one in

(Continued on page 179)

# President Names Rogers to I. C. C.

New appointee is a "career" man, having come with commission in 1917

President Roosevelt, on July 29, named John L. Rogers of Tennessee to fill the remaining vacancy on the Interstate Commerce Commission. Mr. Rogers, who is at present the Chief of the Bureau of Motor Carriers of the commission, takes the place which has been held by Hugh M. Tate. When confirmed by the Senate, Mr. Rogers' term will run until 1943. Mr. Rogers is a "career man," having come with the commission in 1917 as a mechanical engineer in the Bureau of Locomotive Inspection.

Mr. Rogers was born at Knoxville, Tenn., in 1889 and for a time was employed in the mechanical department of the Southern. He later attended the University of Tennessee and George Washington



John L. Rogers

University, receiving the degree of M.E. from the latter. He entered the service of the Interstate Commerce Commission in 1917 as a mechanical engineer in the Bureau of Locomotive Inspection and after studying law at the National University Law School was admitted to the bar. He also studied accounting. In 1925 he became special examiner in the Bureau of Service of the commission and in that position played an active part in investigations by the commission involving refrigeration charges, locomotive equipment, and the six-hour day for railroad employees. In 1933 he was appointed executive assistant to Co-ordinator Eastman. He has been Chief of the Bureau of Motor Carriers since its organization in August, 1935.

#### H. & M. Boosts Fare

The Hudson & Manhattan has announced a four-cent increase in the flat passenger fare between Hudson terminal in lower Manhattan, New York, and Jersey City and Hoboken, N. J., effective September 1. By the new tariff, a 10-cent minimum fare will replace the former six-cent rate.

The base fare of 10 cents already in effect between upper Manhattan and New Jersey points and the per-mileage standard fare in effect in the joint service with the Pennsylvania between New York and Newark. N. J., will continue in effect.

The Hudson & Manhattan, an electric line in interstate service in New York and New Jersey, takes authority for the new fare scale from an order of the Interstate Commerce Commission dated February 28. 1936, permitting a minimum fare charge of 10 cents for all classes of equipment in interstate service. Rising costs and tax levies in the face of increasing competition from recent additions in transit facilities between the metropolis and New Jersev points are given as bases for the fare increase decision.

## \$16,817,408 Net For Five Months

Compares with deficit of \$32.-076,535 for corresponding period of 1936

Class I railroads for the first five months of this year reported a net income after fixed charges and other deductions of \$16,-817,408, as compared with a deficit of \$32,-076,535 for the corresponding 1936 period, according to the Interstate Commerce Commission's monthly compilation of selected income and balance sheet items. For May there was a net deficit of \$47,898 as com-

#### SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS

Compiled from 136 Reports (Form IBS) Representing 142 Steam Railways TOTALS FOR THE UNITED STATES (ALL REGIONS)

	10121	LO TOR THE CHILD STREET (RIDE A	(LOIOZID)	
For the mon 1937	th of May 1936	Income Items	For the five 1937	e months of 1936
\$43,662,952 10,820,723 54,483,675 1,604,360 52,879,315	\$41,797,048 11,416,636 53,213,684 1,533,463 51,680,221	Net railway operating income     Other income     Total income     Miscellaneous deductions from income     Income available for fixed charges	\$237,645,045 52,677,300 290,322,345 8,797,023 281,525,322	\$187,733,851 57,427,359 245,161,210 7,835,583 237,325,627
1.017.473	11,315,861 41,442,474 220,368 52,978,703 * 1,298,482 1,009,973 * 2,308,455 16,169,678	6. Fixed charges: 6-01. Rent for leased roads 6-02. Interest deductions 6-03. Other deductions 6-04. Total fixed charges 7. Income after fixed charges 8. Contingent charges 9. Net income† 10. Depreciation (Way and structures	54,537,763 203,818,508 1,176,575 259,532,846 21,992,476 5,175,068 16,817,408	55,431,423 207,785,660 1,102,511 264,319,594 * 26,993,967 5,082,568 * 32,076,535
2,995,171	2,362,143	and Equipment)	81,199,021 15,431,804	80,684,681 8,958,035
16,013,696 3,439,542	12,870,114 7,819,909	12-01. On common stock	35,247,741 8,355,354	33,912,466 12,729,411
	Si	elected Asset Items	Balance at 1937	end of May 1936
13. Investment companies	its in stocks, (Total, Ac	bonds, etc., other than those of affiliated count 707)	\$699,876,651	\$689,540,112
16. Time dra 17. Special d 18. Loans an 19. Traffic ar 20. Net balar 21. Miscellam 22. Materials 23. Interest a 24. Rents rec	Its and depo- lepositsd bills recei- nd car-service ace receivable eous account and supplie and dividends ceivable	posits sits vable balances receivable from agents and conductors receivable receivable	\$466,827,975 10,329,263 41,144,370 312,050,823 10,627,346 62,328,384 56,196,802 147,553,612 2366,600,051 27,630,018 2,029,288 7,199,550	\$437,323,479 3,774,699 30,787,294 87,740,545 3,378,911 59,452,032 50,881,539 146,661,032 299,847,065 28,695,324 2,411,169 6,033,936
26. Total	current ass	ets (items 14 to 25)	\$1,510,527,482	\$1,156,987,025
	Se	lected Liability Items		
27. Funded d	lebt maturing	g within 6 months;	\$144,215,756	\$277,441,218
29. Traffic at 30. Audited at 31. Miscelland 32. Interest t 33. Dividends 34. Funded of 35. Unmature 36. Unmature 37. Unmature	nd car-service accounts and counts and counts accounts matured under the matured dividends ed interest accorded rents accorded ac	ble§ e balances payable wages payable s payable sid npaid unpaid declared decrued uued	\$222,804,812 80,814,316 259,158,779 129,963,348 578,711,001 1,667,042 480,299,893 19,777,272 120,940,971 40,550,228 26,469,510	\$242,420,997 75,434,836 241,284,763 87,279,834 458,115,753 2,145,525 440,319,309 19,798,911 119,892,943 41,012,116 21,161,484
39. Total	l current lial	oilities (items 28 to 38)	\$1,961,157,172	\$1,748,866,471
40. Tax liabi 40-01. 40-02.	U. S. Gover	t 771): nment taxes	\$135,459,473 131,844,992	\$59,188,735 134,330,259

† The net income as reported includes charges of \$3,282,724 for May, 1937, and \$16,045,853 for the five months of 1937, \$1,453,272 for May, 1936, and \$7,163,866 for the five months of 1936 on account of accruals for excise taxes levied under the Social Security Act of 1935; also \$4,694,911 for May, 1937, and \$22,991,440 for the five months of 1937, \$4,077,191 for May, 1936, and \$12,057,104 for the five months of 1936 under the requirements of an Act approved August 29, 1935, levying an excise tax upon carriers and an income tax upon their employees, and for other purposes. (Public No. 400, 74th Congress.)

‡ Includes payments which will become due on account of principal of long-term debt (other than that in Account 764, Funded debt matured unpaid) within six months after close of month of report.

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§ Includes obligations which mature not more than 2 years after date of issue.

\* Deficit or other reverse items.

#### NET INCOME OF LARGE STEAM RAILWAYS WITH ANNUAL OPERATING REVENUES ABOVE \$25,000,000

	Net income	after depre.	Net income be	efore depre.
Name of milway	For the five		For the five	
Name of railway  Alton R. R Atchison, Topeka & Santa Fe Ry. System§ Atchison, Topeka & Santa Fe Ry. System§ Atlantic Coast Line R. R. Baltimore & Ohio R. R. Boston & Maine R. R Central of Georgia Ry.†. Central R. R. of New Jersey Chesapeake & Ohio Ry. Chicago & Eastern Illinois Ry.‡. Chicago & Eastern Illinois Ry.‡. Chicago & North Western Ry.‡. Chicago, Burlington & Quincy R. R. Chicago, Burlington & Quincy R. R. Chicago, Milwaukee, St. Paul & Pacific R. R.‡ Chicago, Milwaukee, St. Paul & Pacific R. R.‡ Chicago, St. Paul, Minneapolis & Omaha Ry. Delaware & Hudson R. R Delaware & Hudson R. R Delaware, Lackawanna & Western R. R. Denver & Rio Grande Western R, R.‡ Elgin, Joliet & Eastern Ry. Erie R. R. (including Chicago & Erie R. R.) Grand Trunk Western R. R. Great Northern Ry. Illinois Central R. R. Long Island R. R. Louisville & Nashville R. R. Louisville & Nashville R. R. Minneapolis, St. Paul & Sault Ste. Marie Ry. Missouri Yacific R. R.‡ New York Central R. R. New York, Chicago & St. Louis R. R. New York, New Haven & Hartford R. R.‡ Norfolk & Western Ry. Pernsylvania R. R. Pere Marquette Ry. Pittsburgh & Lake Erie R. R. Reading Co. St. Louis Southwestern Lines‡	For the five 1937  * \$245,058     400,927     2,550,193     109,291     564,928     546,270     13,066,693     209,833     8,090,798     147,105     641,240     7,249,142     6,556,799     1,649,837     207,779     1,649,837     207,779     1,230     819,353     1,210,608     2,158,502     112,466     3,270,437     2,923,554     710,307     4,797,331     1,140,099     1,558,708     13,195,551     3,041,637     9,675,336     965,818     1,732,349     3,464,105     3,638,232     *456,871			
Seaboard Air Line Ry.†Southern Ry. Southern Pacific Transportation System	926,642 1,930,201 916,088 1,023,582	* 2,647,295 * 176,591 * 2,126,786 450,406	* 131,495 3,238,710 2,414,163 1,510,069	* 1,864,939 1,176,561 1,159,084 936,336
Union Pacific R. R Wabash Ry.† Yazoo & Mississippi Valley R. R	350,597 * 660,645 195,752	1,010,137 * 1,004,879 * 334,143	3,142,205 228,610 399,534	3,659,180 * 114,349 * 121,422

† Report of receiver or receivers.
‡ Report of trustee or trustees.
‡ Includes Atchison, Topeka & Santa Fe Ry., Gulf, Colorado & Santa Fe Ry., and Panhandle & ta Fe Ry.

§ Includes Atchison, Topeka & Santa Fe Ry., Gult, Colorado & Santa Fe Ry., and Panhandle & Santa Fe Ry.

[Includes Boston & Albany, lessor to New York Central R. R.

[Includes Southern Pacific Company and Texas & New Orleans R. R. The operation of all separately operated solely controlled affiliated companies resulted in a net deficit of \$1,312,711 for five months of 1937 and \$1,690,121 for five months of 1936. These figures are not reflected in this

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pared with a net deficit of \$2,308,455 for the same month in 1936.

Sixty roads reported net incomes for the month of May as compared with 73 who reported deficits. Seventy-one roads reported net incomes for the first five months of this year as compared with 62 who reported deficits. The consolidated statement and a statement of the net income of the roads having annual operating revenues above \$25,000,000 are given in the accompanying tables.

#### Club Meeting

The Traffic Club of Rochester, N. Y., will hold its August golf event on Tuesday, August 10, at the Stafford Country Club, Stafford, N. Y. Dinner will be served at the clubhouse at 6:30 p.m.

#### Eastern Local Fares Modified

Slight reductions in local passenger fares on several eastern roads were made on August 1 when the permanent tariffs filed by the carriers went into effect, replacing the temporary tariffs prepared in June, 1936, pursuant to the Interstate Commerce Commission order for coach fares at two cents per mile. As provided in the abandoned temporary fare scale, to simplify fare schedules and accounting, additions were made to bring coach fares ascertained on

the per-mile basis to the nearest sum ending in "0" or "5." By the permanent tariff, coach fares for distances under 38 miles are computed by the elimination of all decimals which are less than a full cent over "0" or "5." Thus, for distances which exceed by a fraction an integral sum of miles, the new ruling provides a five-cent decrease in rate. A journey of 20.3 miles for example, which by the temporary ruling cost 45 cents, may now be made for 40 cents.

The Long Island, Central of New Jersey, and the Delaware, Lackawanna & Western have announced such tariffs and it is believed that other eastern roads may follow suit.

#### The Canadian Roads in June

The Canadian National had an increase of \$1,352,136 in operating revenues for June and an increase of \$9,534,886 in operating revenues for the first six months ended June 30 as compared with the corresponding periods in 1936.

Net operating revenue for June at \$435,-188 was an increase of \$425,746 over the June, 1936, net of \$9,442. Net for the six months was \$6,667,948, an increase of \$4,-192,908 over last year.

Operating revenues in June totaled \$16,-091,901, as compared with \$14,739,765 in

June, 1936. Operating expenses were \$15,-656,713 against \$14,730,323 during the similar period of last year.

For the six months of the present year. operating revenues were \$94,996,314, as compared with \$85,461,428 in the corresponding period of last year. Operating expenses up to June 30 of this year were \$88,328,366, compared with \$82,986,388 for the similar period of 1936.

The Canadian Pacific in June had net operating income totaling \$1,195,111, which was \$19,561 higher than June, 1936, while net for the half-year period at \$8,260,153 increased by \$1,469,153 over the corresponding period of last year.

Gross revenues in June were \$11,418,963. an increase of \$461,352 over the \$10,957,-610 reported for the same month a year ago while operating expenses rose \$441,791 to \$10,223,852 compared with the \$9,782,-060 in June, 1936.

Gross revenues in the six months ended with June were \$66,790,261, an increase of \$4,745,915 over a year ago, while operating expenses increased by \$3,276,761 to \$58,-530,107 over the \$55,253,346 reported in the first half of 1936.

#### Railroads Lift Embargo on Scrap to Seaboard

Railroads serving Atlantic and Gulf ports have commenced to lift the embargo which has been in effect since February on the movement of scrap iron and steel from interior points to the seaboard. The embargo was ordered because the accumulation of loaded cars at the ports was tying up an undue amount of equipment.

#### Would Regulate Toll Bridges

Representative Drew of Pennsylvania has introduced H.R. 8061, which would amend the Motor Carrier Act of 1935, by providing for the regulation of highways and special highway facilities by the Interstate Commerce Commission when they are used for the transportation of passengers or property by motor carriers engaged in interstate or foreign commerce and for which use tolls are charged.

#### B. & M. to Run Golf Train

An all-expense golf train, believed to be the first of its kind, will be operated out of Boston, Mass., on August 31, by the Boston & Maine. The schedule will be so arranged as to permit a full week-end of golf at the 27-hole courses in Hanover, N. H., which have been selected for patrons of the train. The ticket covers rail fare, all meals, hotel accommodations, golf fees, and transportation to and from the golf courses.

#### French Derailment Takes 30 Lives

Derailment of an evening eastbound Paris-St. Etienne express of the Paris, Lyons & Mediterranean (France) at an open switch on the main line at Villeneuve-St.-Georges, about nine miles from the Paris terminal, caused the death of 30 persons on July 29. The number of casualties recorded by various press dispatches is between 40 and 50. Officers of the road attributed the crash to an error made by the towerman controlling interlocking in the area. The several wooden coaches

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which were placed in the train because of unusually heavy traffic were responsible for the greater part of the injuries.

#### Milwaukee Adds Trains

The Chicago, Milwaukee, St. Paul & Pacific has added three fast trains to its service, principal among which is one between Mason City, Iowa, and Chicago which cuts 2 hr. 51 min. from the fastest previous schedule. This train leaves Mason City at 12:01 p.m. and arrives in Chicago at 7:40 p.m., covering the 355.8 miles by way of Madison, Wis., and Janes-yille in 7 hr. 39 min.

In its Chicago-Milwaukee, Wis., service, a new train leaves Chicago at 8:35 p.m., covering the 85 miles in 80 min. and increasing the number of Chicago-Milwaukee trains to 29. Another train, which connects with the "Hiawatha" at Milwaukee, has been placed in service between Milwaukee and Madison.

#### "Road of Anthracite" Carries Fans to Divisional Terminals

A group of railroad fans and scenery hunters, numbering 483, were the guests of the Delaware, Lackawanna & Western's operating and mechanical departments on July 25 for an excursion and inspection tour of the road between New York and Binghamton, N. Y. Furnished a 14-car train, completely air-conditioned, with the exception of a Pullman observation car at the rear, and hauled between Scranton, Pa., and Binghamton by two of the road's semistreamlined "Pacifics," the party made a round-trip of approximately 385 miles between Hoboken, N. J., the Lackawanna's New York gateway, and the divisional yards and engine terminal at East Binghamton, passing en route over the 28-mile New Jersey cut-off and the Clark Summit-Hallstead by-pass, which includes the famous Tunkhannock viaduct, 2,375 ft. in length and towering 240 ft. over the valley whose name it bears.

At both East Binghamton and Scranton, Pa., the excursionists were given opportunity to inspect thoroughly the road's facilities. At the former point, the smaller locomotives, largely moguls and "4-4-0's," which perform local service on the Utica and Syracuse divisions, were spotted con-

Mediation Board Announces
Wage Settlement

The National Mediation Board on the night of August 4, announced that an agreement had been reached between the non-operating unions and the railroad management calling for an increase effective August 1, of 5 cents in the hourly wage of members of these organizations, estimated to number from 750,000 to 800,000 employes. On the basis of 1936 operations the increase will cost the Class I Railroads approximately \$98,000,000 annually.

The railroads also agreed to end "share the work" arrangements for these employes from September 1 on and to arrange for work to be done by full time employes, selected under the seniority rules.

The agreement has no date of termination, but is to continue in operation until ended by machinery provided under Railway Labor Act.

The Mediation Board highly commended both parties to the negotiations for their "calm patience" and hailed the outcome as "reasonable, just and far-sighted."

veniently for engine picture collectors. The two-hour halt at Scranton, in the heart of the anthracite region, was taken up with a tour through the Lackawanna's main motive-power shops, a directed observation of the process of preparing engines for road service, and inspection of representative types of modern steam locomotives of the road.

The inspection tours were supplemented by a pocket guide describing landmarks of interest along the route and a specially prepared booklet containing a history of the Morris & Essex, the parent corporation in the Lackawanna's New Jersey trackage, a detailed description of the Scranton and East Binghamton engine facilities, and a roster of the locomotive types to be seen at each point. There were also appended a facsimile of a No. 31 train-order giving rights to the special run

and a portion of the employees' timetable concerning the route traversed, with space provided for "o.s." entries for the excursion train.

#### "Minnesota 400" to Operate to Chicago

The "Minnesota 400" of the Chicago & North Western, which has been operating between Wyeville, Minn., and Mankato. will be replaced by a new train on August 8 which will operate between Chicago and Mankato. This completely air-conditioned train, carrying modern coaches, parlor cars and a limousine cafe-lounge car, will leave Chicago at 2 p. m. and will arrive at Mankato at 11:35 p. m., while returning it will leave Mankato at 10:30 a. m. and will arrive in Chicago at 7:35 p. m. Northbound it will operate via Janesville, Madison and Wyeville, covering the 442.4 mi. in 9 hr. 35 min. At Wyeville connection will be made with the "400." Southbound it will operate via Elroy, Madison and Janesville, covering the 430.2 mi. in 9 hr.

# Highway-Railroad Grade Crossing Accidents

Fatalities resulting from highway-rail-road grade crossing accidents in the first four months of this year totaled 620, an increase of 97 compared with the corresponding period last year, according to the Safety Section, Association of American Railroads. In the first four months this year, 1,855 persons were injured in such accidents compared with 1,717 in the corresponding period in 1936; accidents totaled 1,606, an increase of 179 compared with the first four months in the preceding year.

In the month of April alone, there were 125 fatalities resulting from grade crossing accidents, a decrease of two below April, last year, while 358 persons were injured compared with 365 one year ago. There were 307 grade crossing accidents in April, this year, compared with 308 in April, 1936.

#### I.C.C. Approves Pullman Depreciation Rates

The Interstate Commerce Commission, Division 4, has approved rates at which the Pullman Company desires to charge off depreciation on its equipment. The rates were submitted in accordance with an order of the commission on May 18, 1936, and will apply, if the company so desires, from January 1, 1937, until they are further revised by the commission. The component percentage rates of depreciation are as follows:

General office buildings, 9.8 per cent; shops, 2.93 per cent; miscellaneous structures, 3.73 per cent; shop machinery, 3.85 per cent; standard sleeping cars, 3.79 per cent; tourist sleeping cars, 3.94 per cent; parlor cars, 3.86 per cent; composite cars, 3.7 per cent; private cars, 3.58 per cent; dining cars, 3.74 per cent; miscellaneous equipment, 7.02 per cent.

#### Court Declares Contractors' Bonds Cover Railway Charges

A carrier to which is owed payment of freight bills on material used in the construction of a public building, or consigned



Excursionists View the Lackawanna's Tunkhannock Viaduct

to public work projects, may recover upon the contractor's bond, according to a decision recently handed down by the Fifth Circuit Court of Appeals affirming judgment of the district court for southern Florida, in re Standard Accident Insurance Company vs. United States (acting for the receivers of the Seaboard Air Line). In the case under discussion, the contractor defaulted in payment of freight charges on material destined for use in the construction of a post office building, and the court found that the carriage of such material brings the railroad within the scope of the contractors statutory bond, which covers payment to "a corporation which has furnished labor and materials used in the construction or repair of any public building or public work."

#### Rivers and Harbors Allotments

Secretary of War Woodring on July 29 approved allotments totaling \$94,478,201 for new work on rivers and harbors projects provided for in the War Department civil appropriations act of July 19, 1937. The largest allotment of this group is that of \$27,000,000 for work on the Mississippi river from the Missouri river to Minneapolis, Minn. Another \$900,000 goes to that section of the Mississippi between the Ohio and the Missouri. The Missouri river between Kansas City and Sioux City gets \$7,000,000, the section from Kansas City to the mouth \$400,000, and the Fort Peck dam \$7,704,000.

Other allotments include: Cape Cod Canal, \$3,500,000; Great Lakes to Hudson Waterway, \$5,000,000; Chesapeake and Delaware Canal, \$2,000,000; Black Warrior, Warrior and Tombigbee rivers, \$1,-684,000; Illinois Waterway, \$4,488,951; Kanawha river, \$2,480,000; Sacramento river and tributaries, \$1,500,000; Houston Ship canal, \$1,500,000.

#### Mid-Western Coal Rates

The Interstate Commerce Commission in a decision on the complaint of the Illinois Coal Traffic Bureau versus Alton et al (No. 27107) has ordered a revision of the rate relationship on nut coal as between Illinois groups on the one hand and Pittsburg, Kan., and other southwestern origin districts on the other hand, to destinations in central and western Missouri and Ne-

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Other findings are summarized as follows: Rates on coal from the southern Illinois, DuQuoin, and Belleville groups and a portion of the Springfield group, in Illinois, to destinations in Missouri found not unreasonable, except to certain destinations on the St. Louis-San Francisco; minimum weights on coal from the Illinois groups named to destinations in Missouri found unduly prejudicial; intrastate rates on coal in Missouri found not unlawful; rates on coal from mines in Missouri, Kansas, Arkansas, and Oklahoma to destinations in Nebraska found not unreasonable or unduly prejudicial.

#### Amendment to Railroad Retirement Act Introduced

Senator Davis, of Pennsylvania, has introduced S. 2860, a bill to amend sections 1 and 2 of the railroad retirement

act with respect to definition of the term, "years of service," and the computation of such service. The bill would also provide for the granting of annuities to disabled employees with 25 instead of 30 years of service. Under the bill the term "years of service" would include (1) the number of years an individual as an employee shall have rendered service to one or more employers for compensation or received remuneration for time lost; (2) the number of years an individual while on furlough from an employer shall have served in the armed forces of the United States during any war engaged in by the United States; (3) the number of years an individual while in the employment relation shall have been absent on account of sickness or disability not due to his own misconduct; and (4) the number of years an individual shall have been on furlough from an employer through no fault of his own.

#### Wheeler Charges C. & O. Stock Issue Was Illegal

Charging that a recent issuance of preference stock by the Chesapeake & Ohio was illegal because it had not been authorized by 90 per cent of the road's stockholders, Senator Wheeler, on August 3, resumed hearings of his subcommittee which is investigating railroad financing. Senator Wheeler opened the hearing by telling Thomas H. Jones, C. & O. lawyer, that he felt that the validity of the issuance of the preference stock was open to "serious question." Mr.

Jones challenged Senator Wheeler's contention by saying that the validity of the issue had been certified by the Corporation Commission, Senator Wheeler spent the better part of the two hour session attempting to show that the C. & O. had violated its charter provision which provides that before any voting rights are changed, there must be approval of the change by 90 per cent of the stockholders. The issuance of the preference stock carried the right to elect two of the road's directors.

The session on August 4 was devoted to the examination by committee counsel of the plan of consolidation of the Alleghany and Chesapeake Corporations which is being prepared under the direction of Robert R. Young, one of the triumvirate which recently purchased control of the vast Van Sweringen "empire." The highlight of the session came when Senator Wheeler got Mr. Young to admit that he had contributed \$15,000 to the Democratic National Committee by buying some of the convention books which have been much discussed recently in both the House and Senate. Mr. Young made it plain that he purchased the books himself and not for any of the corporations with which he is affiliated. Senator Wheeler tried to get Mr. Young to admit that he was solicited in view of the fact that he had certain matters pending before various commissions in Washington. This he declined to do.

The committee intends to examine the plan minutely so that there will be no



D. & H. Police Prize-Winning Pistol Team

The team, organized after the road decided that all its officers should be thoroughly trained in the intelligent and discriminative use of the revo'ver, has recentl world records in contests with the nation's ablest mark: men. In three matches the team and its individual members have collected 7 trophies, 20 gold medals, 39 silver medals, 53 bronze medals, a plaque and several merchandise awards

violation of the law as far as the rights of the public and the various security holders are concerned.

#### Denies Northland Greyhound Route-Purchase Application

The Interstate Commerce Commission, Division 5, has denied the application of the Northland Greyhound Lines for authority to purchase for \$70,000 the operating rights of the Sioux Limited Lines on a route between Minneapolis, Minn., and Chicago, by way of Wisconsin. To the majority report, by Commissioners Lee and Caskie, Commissioner Eastman dissented, contending that the application should be granted.

The majority pointed out that Greyhound and Sioux are the only through operators on the Minneapolis-Chicago route, via Wisconsin, and that the former's fare, which it proposed to maintain, is 20 per cent higher than that of Sioux. Thus, while it is clear to the commission "that the applicant would substantially benefit if vendor were to be eliminated as a competitor," it is "not so clear that the public would gain."

Commissioner Eastman would have granted the application because "there is an extraordinary amount of passenger transportation competition between Chicago and the Twin Cities." And in view of this competition "which the railroads and private automobiles are offering and will continue to offer" he thinks that the elimination of Sioux Limited Lines (for which "the future holds forth no very encouraging prospects") "will in the long run improve rather than impair conditions for the traveling public."

#### Bardo, Westchester Trustee, Dies of Stroke

Clinton Lloyd Bardo, trustee of the New York, Westchester & Boston since December 23, 1935, died in New York City on August 2 at 69 from a stroke of partial paralysis which came upon him as he was inspecting construction work on the road. Though Mr. Bardo spent the



Clinton L. Bardo

greater part of his life in railroad operating service, he gained a nation-wide reputation also as president of the National Association of Manufacturers and as a leader in the shipbuilding industry.

Mr. Bardo was born at Montgomery, Pa., on October 24, 1867. After an education in the public schools, he entered railway service in 1885 as a telegraph operator with the Pennsylvania, later transferring to a similar post with the Reading. He interrupted railway service for one year to occupy the position of supply agent for the Tidewater Oil Com-Returning to the rails in 1887, he served the Lehigh Valley as operator and later as dispatcher, and in 1893 was appointed trainmaster. After 11 years in this capacity, he became assistant superintendent of the New York, New Haven & Hartford in 1904. From 1907 to 1912 he was superintendent of the New York Central. Returning to the Lehigh Valley in 1912 he became its assistant general manager. From 1913 to 1925 he was general manager of the New Haven and president and general manager of its subsidiary, the Central New England.

Abandoning his railroad career for a time, Mr. Bardo became vice-president of the American Brown-Boveri Electric Corporation in 1925 and in 1928 assumed the presidency of the New York Shipbuilding Company, its subsidiary.

In 1934 and 1935 he was president of the National Association of Manufacturers and played an important part in the controversies centering about the N.R.A. codes. Retiring from the New York Shipbuilding Company in 1934, Mr. Bardo reentered railway service approximately a year later when he accepted the trusteeship of the New York, Westchester & His work in railroad research Boston. included the chairmanship of the committee on prevention of accidents at grade crossings and of the operating committee, American Railway Association, 1923-1925. He was the author of "Division and Tidewater Terminals."

#### N. P. Entitled to Settlement in Land Grant Case

After five years of litigation, Frank Graves, special master, recommended in a report filed in the federal district court at Spokane, Wash., on July 27, that the Northern Pacific is entitled to full settlement for lands granted it by the government under the Congressional acts of 1864 and 1870 with certain restrictions. The report, of several hundred pages, which, in general, finds that the government has confiscated approximately 2,377,220 acres of land granted to the railroad, now awaits final approval by the district court.

One major issue in which the special master held with the railroad was on the interpretation of the term "agricultural lands" as set forth in the grant. The railroad was allowed to take agricultural lands in indemnity belts to replace losses due to homesteading and mineral development of acreage lying within the original grant. Government lawyers argued that the term "agricultural" lands meant tillable lands and did not include forest or grazing land. Railroad counsel contended that it was entitled to all non-mineral lands under that term and the special master held with the railroad under the broad terming of "nonmineral," thereby giving the railroad the right to nearly 2,000,000 acres upon which

it would otherwise have no claim. The value of the land, however, is questionable, since much of it lies upon mountains and some of it is under perpetual snow.

The special master held with the government on the so-called "Tacoma overlap" case and the overlap of grants in Wisconsin with the Winnebago & Superior Portage railway. In the Tacoma overlap case where grants to the Northern Pacific from Tacoma to Portland overlapped grants on the line from Tacoma to Spokane, the master ruled that the railroad was not entitled to replacement of the overlapped acreage. The railroad contended that these terms referred to lands disposed of or granted to itself as well as others. The special master held that it referred only to others and the railroad could not rightfully claim lands as lost in the Portland-Tacoma grant when the company had gained them in the Tacoma-Spokane grant.

#### Rail Wage Deductions Ruled To Be Taxable

The Bureau of Internal Revenue has ruled that the amount of tax deducted by a railroad from the compensation of its employees under the provisions of the carriers taxing act constitutes taxable income to the employees for federal income tax purposes and is not deductible as a tax under the Revenue Act of 1936. The ruling of the Bureau goes on to state that the amount deducted by the carrier from compensation of its employees is held to be constructively received by the employee and is regarded as though the employee had actually received the amount in cash and had thereafter expended it in payment of the tax imposed. The import of the ruling is that the entire amount of the employee's compensation should be included in the gross income for federal income tax purposes without any deduction on account of the income tax imposed by the carriers' taxing act and withheld from the employee's compensation by the employer.

Because of a previous ruling, deductions under the Social Security Act are not similarly affected.

#### Court Rules Posting of Car Placement Notice Sufficient

In a decision regarding reconsignment charges, 89F (2d) 752, the Eighth Circuit Court of Appeals has ruled that the posting of car placement data on yard bulletin boards is sufficient for adequate information of consignees, provided that the practice has been in vogue on the individual road for a reasonable length of time. The decision, which affirms judgment for the railroad in the Northern Pacific vs. the Becher-Barrett-Lockerly Company case, appellate from the federal district court for Minnesota, points to general tariff rules stipulating that information as to arrival and location of cars may either be sent to the consignee or be posted on the carrier's bulletin board "where such practice is in vogue."

The court held that posting arrival notices on the bulletin board was in strict conformity with the tariff rule; that the expression "in vogue" did not necessarily

mean general practice and usage by all the carriers in Minneapolis (locale of the dispute), but rather the practice of the plaintiff as to its own cars moving on its own tracks to the consignees. In this instance the bulletin board had been in use for over two years.

The consignee had argued that the pub-

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lication of the placement and location of cars on the hold track by posting the car number, consignee's initials, date of arrival, and track number of the hold track on a bulletin board in plaintiff's yard office was not in conformity with the reconsignment tariff rule; that the practice of bulleting the notice of the placement of cars in the yard office was not "in vogue" in Minneapolis; and that defendant had no notice that plaintiff had established a bulletin board for such notices in its yards.

#### Freight Car Loading

Revenue freight car loading for the week ended July 24 totaled 770,980 cars, an increase of 905 cars or one-tenth of one per cent above the preceding week, an increase of 39,999 cars or 5.5 per cent above the corresponding week in 1936, and an increase of 175,408 cars or 29.5 per cent above the corresponding week in 1935. All commodity classifications except live stock, forest products and ore showed increases over the preceding week, while all commodity classifications except coal, grain and live stock showed increases over last year. The summary, as compiled by the Car Service Division, Association of American Railroads, follows:

#### Revenue Freight Car Loading

For Week	Ended Sat	urday, July	24
Districts	1937	1936	1935
Eastern	155,203 157,929 49,357 98,870 135,440 118,535 55,646	152,700 147,996 49,785 95,124 121,183 108,952 55,241	129,458 116,841 43,433 79,228 88,912 89,822 47,878
Total Western Districts	309,621	285,376	226,612
Total All Roads.	770,980	730,981	595,572
Commodities Grain and Grain Products	51,648	54,999	33,357
Live Stock Coal Coke	108,766 10,473	13,648 112,946 8,612	9,672 102,916 4,560
Ore	77,470	34,700 55,174	28,682 34,700
L.C.L Miscellaneous	165,609 305,714	162,337 288,565	154,978 226,707
July 24 July 17 July 10 July 3 June 26	770,075 682,205 806,168	730,981 720,359 724,277 649,703 713,588	595,572 592,672 565,502 471,126 616,863

Cumulative Total, 30 Weeks ....21,957,534 19,409,114 17,385,601

In Canada.—Car loadings for the week ended July 24 totaled 49,551, as against 49,858 for the previous week and 45,496 cars for the corresponding week last year, according to the statement of the Dominion Bureau of Statistics.

Total for	Cana	ada:		Total Cars Loaded	Total Cars Rec'd from Connections
July				49,551	24,518
July	17.	1937		49,858	24,684
July	10,	1937		51,821	22,940
July	18,	1936		45,496	21,280
Cumulativ	ve T	otals f	for Canad	la:	
July	18.	1936		1,262,406	676,122
July		1937		1,385,937	
July	20.	1935		4 0 / / BOO	635,544

#### Western First Class Round-Trip Rate Raised to 21/4 Cents

In order to equalize the differentials between various basic passenger rates, the western and southeastern lines will, on October 16, change the rate for first class round trip fares from 2 cents to 21/4 cents a mile. Under the prevailing rates the round trip coach rate of 1.8 cents a mile is a reduction of 10 per cent under the one way rate of 2 cents, while the round trip first class rate of 2 cents is 331/3 per cent less than the first class one way rate of 3 cents. The new rate of 21/4 cents will be a reduction of 25 per cent. The new rate will affect about 10 per cent of the business and will increase first class round trip revenues approximately \$2,000,000.

The basic rates now in effect in various territories are as follows:

of the railroad affiliate; and "in recognition of the inconsistency which would result from Wilson's control of a line which would parallel and compete with the operation of the transportation company of which he is president."

The examiner finds, however, that "this commission should not be a party to permitting carriers to temporarily withdraw from serving the public over a route on which they presumably have operating rights by the simple expedient of leasing their rights to another carrier operating between the identical points, unless it is understood such withdrawal is tantamount to a permanent withdrawal, and abandonment of such rights. Certainly a strict construction of section 206, relating to bona fide operation over the route or routes involved on June 1, 1935, and oper-

First Class one way	Eastern 3	South Eastern	Western 3
First Class round trip	3	2, proposed 2 <sup>1</sup> / <sub>4</sub> 15 day limit	2, proposed 21/4 30 day limit
First Class round trip	• •	6 mo, limit	6 mo. limit
Transcontinental one way Transcontinental round trip			1.8 to 2
Coach one way	2	1½ on majority 2 on others	2
Coach (Transcontinental) one way	2	Same as above	1.8 1½ 1½ to 2
Summer First Class round trip	2.88 to certain points	2.1 to 2.88	
Summer Coach round trip Winter First Class round trip	2.88	2 to 2.88	1 1/3 to 1.8 2 to 21/2
Winter Coach round trip		11/3 to 2	1 1/3 to 2

#### Says Rail Employee Can Have Private Trucking Interests

The motor carrier act's stipulation that Interstate Commerce Commission decisions authorizing acquisition of control of highway carriers must, where railroads are involved, include the finding that the transaction "will promote the public interest by enabling such carrier to use service by motor carrier to public advantage in its operations and will not unduly restrain competition" requires "something more than the relationship in the capacity of an employee of a rail carrier" in the view of Examiner John S. Higgins as expressed in a proposed report on applications involving personal motor carrier interests of William Wilson, president of the Wilson Transportation Company, highway af-filiate of the Chicago, St. Paul, Minneapolis & Omaha, and superintendent of motor transportation for that road.

Counsel for one of the protestants raised this point but the examiner disposes of it with observations to the effect that the railroad may dispense with Mr. Wilson's services at any time; that it has never attempted to dictate to him in matters of policy; and that in the event of a possible clash "he would follow his investment."

The report recommends that Mr. Wilson be authorized to acquire control of Flamming Motor Express, Inc., operating in the territory between Sioux City, Ia., and Martin, S. D., and that Flamming be permitted to purchase the operating rights and property of Vernon C. Van Derhule in the same territory. The examiner would, however, dismiss the accompanying application of Flamming Motor Express for authority to lease the operating rights of the Wilson Transportation Company from Sioux City to Presho and Winner, S. D. This application was filed because the Van Derhule line parallels that route

ation since that time, does not contemplate that of two carriers having similar operating rights between common points, one may do the work of both and keep alive the operating rights of both pending the convenience of the second party to resume operations."

#### I. R. C. Bulletin Stresses Branch Line Economies

Comprising a summary of various methods employed in the reduction of operating expenses on branch and light-traffic lines by roads reporting from member nations, an article on secondary line economy appears in a recent issue of the International Railway Congress Association's monthly bulletin. The author, G. C. Palmieri, chief inspector of operations of the Italian state system, has been able to ascertain four main classes of expense reduction common to all of the correspondent countries. They are: (1) restriction of signal facilities, grade crossing protection, and roadway inspection; (2) adoption of simplified operating rules, with attenuation of customary main-line regulations; (3) limitation of station-duty hours; (4) simplification of station work in connection with freight service.

In treatment of the methods employed in cutting train costs, the article points to specific practices in the use of small units for elasticity in schedule and fuel economy. A short description is given of the so-called "push and pull" steam trains employed by the British roads, which, without shifting the engine, may be operated in either direction by means of remote control in the end car. There is also mentioned the French practice of dispensing with the fireman on small steam engines, utilizing the conductor for aid when required. Motor rail cars in general receive some attention, but the discussion is large-

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ly concerned with the question of power The author feels that it is requirements. more efficient to use cars of restricted power adapted for very light service, equipped with multiple-unit control for use when larger consists are required, as compared with trailer operation and consequent need for higher power capacity.

In respect to signal and dispatching economies, the article states that in many countries the approach signals on lighttraffic lines have been abandoned and complicated interlocking signals replaced by simple marker plates specifying speed reductions. In the effort to reduce telegraph operator costs, many continental roads have introduced direct telephoning between dis-

patcher and train crews.

Considerable station staff economies have been effected by the French railways through the utilization of accountancy "center-stations" which perform the billing and report work for branch-line communities and on other continental lines unimportant stations have been given to the management of "supplementary" employees on a part-time, contract basis.

#### Rules Issued for Collection of Truck Freight Charges

Division 5 of the Interstate Commerce Commission has issued a set of rules and regulations governing the settlement of rates and charges of common carriers of property by motor vehicle. The regulations, which are five in number, will become effective on October 1. They are as follows:

1. Upon taking precautions deemed by them to be sufficient to assure payment of the tariff charges within the credit period herein specified, common carriers by motor vehicle may relinquish possession of freight in advance of the payment of the tariff charges thereon and may extend credit in the amount of such charges to those who undertake to pay them, such persons herein being called shippers, for a period of 7 days, excluding Sundays and legal holidays other than Saturday half-holidays. When the freight bill covering a shipment is presented to the shipper on or before the date of delivery, the credit period shall run from the first 12 o'clock midnight following delivery of the freight. When the freight bill is not presented to the shipper on or before the date of delivery, the credit period shall run from the first 12 o'clock midnight following the presentation of the freight bill.

2. Where a common carrier by motor vehicle has relinquished possession of freight and collected the amount of tariff charges presented by it as the total amount of such charges, and another freight bill for additional freight charges is thereafter presented to the shipper, the carrier may extend credit in the amount of such additional charges for a period of 30 calendar days to be computed from the first 12 o'clock midnight following the presentation of the subsequently presented

freight bill.

3. Freight bills for all transportation charges shall be presented to the shippers within 7 calendar days from the first 12 o'clock midnight following delivery of the freight.

4. Shippers may elect to have their freight bills presented by means of the United States mails, and when the mail service is so used the time of mailing by the carrier shall be deemed to be the time of presentation of the bills. In case of dispute as to the time of mailing the postmark shall be accepted as showing such

5. The mailing by the shipper of valid checks, drafts or money orders, which are satisfactory to the carrier, in payment of freight charges within the credit period allowed such shipper may be deemed to be the collection of the tariff rates and charges within the credit period for the purpose of these rules. In case of dispute as to the time of mailing the postmark shall be accepted as showing such

#### Oil and Gas Power Meeting at Penn. State

The Oil and Gas Power Division of the American Society of Mechanical Engineers will hold its tenth annual national meeting at State College, Pa., August 18 to 21. The program includes several items of interest to railroad men. Among these are the following:

WEDNESDAY, AUGUST 18

Wednesday, August 18
2 p. m.
General Session
Progress Reports by American Locomotive Company, Atlas Imperial Diesel Engine Company,
The Buda Company, Caterpillar Tractor Company, Davenport-Besler Corporation, DeLavergne Engine Company, General Motors Corporation, Ingersoll-Rand Company, Nordberg Manufacturing Company and others.
U. S. Navy Contributions to Diesel Engine Development, by E. C. Magdeburger, Bureau of Engineering, U. S. Navy Department.

THURSDAY, AUGUST 19 9:30 a. m. Fuels and Lubrication Session Lubrication Problems in Connection with High-Speed Diesel Engines, by C. G. A. Rosen, Caterpillar Tractor Company. Correlation of Laboratory Tests on Fuel Oils with Field Operation, by W. F. Joachim, U. S. Naval Experiment Station.

2 p. m. Transportation Session Recent Developments in Automotive Type Diesel Engines, by O. D. Treiber, Hercules Motors Corporation.

FRIDAY, AUGUST 20
9:30 a. m.
Operating Session
1936 Oil Engine Power Cost Report, by H. C.
Major, chairman, Oil Engine Power Cost
Sub-Committee.
Waste Heat Recovery from Diesel Engines, by
Glenn C. Boyer, Burns & McDonnell Engineering Company.
Penn State Method of Testing Diesel Fuels, by
J. S. Chandler, Pennsylvania State College.

SATURDAY, AUGUST 21 9:30 a. m. Research Session

Oil Flow Through Fuel Nozzles, by Prof. K. J. DeJuhasz, Penn State College.
Polymerization of Fuel Oils, by Gustav Egloff, Universal Oil Products Company.

There will be an exhibit of Diesel engine parts and accessories held in connection with this meeting.

#### Another Forwarder Gets Broker License from I.C.C.

Following the precedent which it had established in the Acme Fast Freight case, the Interstate Commerce Commission has now granted a broker's license to another forwarder-the Walker Freight Service, Inc. The Acme decision, which set forth at length the reasoning whereby the commission stretched the motor car-

rier act's definition of "broker" to include the operations of freight consolidators, was reported in the Railway Age of July 24. As in the Acme case, Commissioner Eastman disagreed also with the majority report by Commissioners Lee and Caskie in the Walker case. He reiterates his opinion that a forwarder is not a broker and refers to his expression of partial concurrence in the Acme case.

Because the points of law raised by various parties in the Walker case were substantially the same as those discussed in the Acme decision, the commission did not again go over the same ground. It did, however, consider briefly the position taken by the intervening National Carloading Corporation that Walker Freight Service is neither a common carrier by motor vehicles nor a broker under the act and is not subject to the provisions thereof in any respect."

National "forcibly urged" that the term "broker" means "an intermediary employed for a commission or brokerage to negotiate a matter between two parties"; and contended Walker's manner of operation and its relation to the owner of the goods "precludes a finding that it is a broker either generally or under the act."

"This contention," the report says, "causes us to repeat the observation made in the report in the Acme case that the definition of 'broker' in the motor carrier act is manifestly of wider scope than the ordinary judicial or text writer's definition of the word and induces us to supplement what was there said in this connection."

"The wording of the statute," the report continues, "makes it clear that the act was not intended to subject to regulation, as transportation brokers, only those persons who act simply as intermediaries. If this were so, certain language in sections 203 (a) (18) and 211 (a) would appear to be without meaning. For instance, a broker is defined as any person not included in the term 'motor carrier' and not a bona fide employee or agent of any such carrier, who or which, as principal or agent, does certain things. A strict intermediary does not act as principal but only as agent of those who employ him. 'broker' who holds himself out to procure the services of motor carriers for shippers or travelers might not be employed as an agent for the carriers, and on the other hand he might have no such employment from the shippers or travelers. In other words, he may set himself up as an independent establishment offering service to shippers or travelers for compensation. Any shipper or traveler could seek him out at any time and get and pay for such service, just as a customer gets service from a railroad or a telephone company or a doctor or a lawyer. Such a relationship is not, in our opinion, one of mere technical agency."

The license granted to Walker Freight Service authorizes it to operate as a broker in arranging for the transportation of commodities generally by motor vehicle between points in New England and the Middle Atlantic States. The applicant was described in the report as one whose "shipments are now transported wholly by motor vehicle with the exception that on infrequent occasions, described as emergencies, the rail service of the New York, New Haven & Hartford is used between Providence, R. I., and New York."

#### N.R.O.I. Up 25% For Six Months

(Continued from page 171)

the Southern district, and eleven in the Western district.

The June net railway operating income was \$58,939,875, which, for that month, was at the annual rate of 2.82 per cent; in June, 1936, the net was \$50,258,671 or 2.42 per cent, and in June, 1930, it was \$67,683,471 or 3.27 per cent.

Gross for June amounted to \$351,703,689 compared with \$330,620,688 in June, 1936, and \$439,377,179 in June, 1930. Operating expenses in June totaled \$265,578,652 compared with \$241,764,770 in the same month in 1936, and \$330,732,585 in June, 1930.

Class I roads in the Eastern district for the first six months in 1937 had a net railway operating income of \$181,971,698, a return of 3.30 per cent; for the same period in 1936, their net was \$161,337,941 or 2.94 per cent, while in 1930 it was \$215,-790,724 or 4.06 per cent. Gross in the Eastern district for the first six months totaled \$1,063,107,696, an increase of 10.3 per cent compared with 1937, but a decrease of 21 per cent compared with 1930. Operating expenses totaled \$759,515,244, an increase of 9 per cent above the same period in 1936, but a decrease of 25.2 per cent under the first half of 1930. For June Class I roads in the Eastern district had a net railway operating income of \$26,718,074 compared with \$30,001,043 in June, 1936, and \$38,056,351 in June, 1930.

Class I roads in the Southern district for the first six months of this year had a net railway operating income of \$42,-067,175, or 2.69 per cent, as compared with a net of \$32,366,970, or 2.07 per cent, for the first half of 1936, and \$42,941,024, or 2.64 per cent, in 1930. Gross in the Southern district for the first six months amounted to \$268,280,411, an increase of 11.8 per cent compared with the same period in 1936, but a decrease of 21.6 per cent under 1930. Operating expenses totaled \$198,009.700, an increase of 8.4 per cent above 1936, but a decrease of 26.9 per cent under 1930. The Southern district's net railway operating income for June was \$5,991,725 compared with \$4,683,952 in June, 1936, and \$4,045,590 in June, 1930.

Class I roads in the Western district for the first six months in 1937 had a net railway operating income of \$73,302,904. a rate of 1.98 per cent; for the same six months in 1936, their net was \$44,311,516, or 1.2 per cent, and in 1930 it was \$110,-184,503 or 2.97 per cent. Gross revenues in the Western district for the six months amounted to \$755,882,329, an increase of 13 per cent above the same period in 1936, but a decrease of 22.1 per cent under the same period in 1930. Operating expenses totaled \$601,393,046, an increase of 11.1 per cent compared with 1936, but a decrease of 21.2 per cent under 1930. For June alone, the railroads in the Western district reported a net railway operating

income of \$26,230,076 compared with \$15,-573,676 in June, 1936, and \$25,581,539 in June, 1930.

#### Meetings and Conventions

The following list gives names of secretaries, date of next or regular meetings, and places of meetings:

The following list gives names of secretaries, date of next or regular meetings, and places of meetings:

AIR BRAKE ASSOCIATION.—R. P. Ives, Westinghouse Air Brake Co., 350 Fifth Ave., New York, N. Y.

ALLIED RAILWAY SUPPLY ASSOC'ATION. — J. F. Gettrust, 1108 New Post Office Bldg., Chicago, Ill. To meet with Car Department Officers' Association, International Railway General Foremen's Association, Master Boiler Makers' Association, and the Railway Fuel and Traveling Engineers' Association. Exhibit, September 28-October 1, 1937, Hotel Sherman, Chicago, Ill.

American Association of Freight Traffic Officers.—W. R. Curtis, F. T. R., M. & O. R. R., Chicago, Ill.

American Association of General Baggage Agents. — E. L. Duncan, 816 McCormick Bldg., Chicago, Ill. Annual meeting, September 21, 1937, Boston, Mass.

American Association of Passenger Traffic Officers.—W. C. Hope, C. R. R. of N. J., 143 Liberty St., New York, N. Y. Annual meeting, November 8-9, 1937, Hotel Everglades, Miami, Fla.

American Association of Railroad Superintenders, November 8-9, 1937, Hotel Everglades, Miami, Fla.

American Association of Railroad Superintenders, October 11-13, 1937, Mayflower Hotel, Washington, D. C.

American Association of Railway Advertising Agents. — E. A. Abbott, Poole Bros., Inc., 85 W. Harrison St., Chicago, Ill. Annual meeting, January 14-15, 1938.

American Association of Railway Advertising Agents. — E. A. Chicago, Ill. Annual meeting, October 11-13, 1937, Mayflower Hotel, Washington, D. C.

American Railway Bridge and Building Supply Men's Association. — C. A. Lichty, 319 N. Waller Ave., Chicago, Ill. Annual meeting, October 11-13, 1937, Mayflower Hotel, Washington, D. C.

American Railway Bridge and Building Supply Men's Association of American Railroads, Engineering Division.—Frank McNellis (Asst. Secv.), 59 E. Van Buren St., Chicago, Ill. Annual meeting, October 19-19, 1937, Hotel Stevens, Chicago, Ill. Annual meeting, October 19-19, 1937, Hotel Peabody, Memphis, Tenn.

American Railway Cole Foremen's Associati

30-October 1, 1937, Hotel Sherman, Chicago, III.

American Short Line Railroad Association.—
R. E. Schindler, Union Trust Bidg., Washington, D. C. Annual meeting, October 1819, 1937, Blackstone Hotel, Chicago, III.

American Society of Mechanical Engineers.
—C. E. Davies, 29 West 39th St., New
York, N. Y.
Railroad Division.—Marion B. Richardson,
21 Hazel Ave., Livingston, N. J.

American Transit Association.—Guy C. Hecker, 292 Madison Ave., New York, N. Y.
Annual meeting, September 19-23, 1937, The
Greenbrier Hotel, White Sulphur Springs,
W. Va.

American Wood Preservers' Association. — H.
L. Dawson, 1427 Eye St., N. W., Washington, D. C. Annual meeting January 2527, 1938, Congress Hotel, Chicago, III.
Association of American Railroads. — H. J.
Forster Transportation Bidg., Washington,
D. C.
Operations and Maintenauce Department

December 2.
 Operations and Maintenance Department.

 J. M. Symes, Vice-President, Transportation Bldg., Washington, D. C.
 Operating-Transportation Division. — L.
 R. Knott, 59 E. Van Buren St., Chicago, Ill.
 Transportation Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.

Freight Station Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill. Operating Section.—J. C. Caviston, 30 Vesey St., New York, N. Y. Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.

N. Y.

Protective Section.—J. C. Caviston, 30
Vesey St., New York, N. Y.
Safety Section. — J. C. Caviston, 30
Vesey St., New York, N. Y.
Telegraph and Telephone Section —
W. A. Fairbanks, 30 Vesey St.,
New York, N. Y. Annual meeting,
Oct. 5-7, 1937, Medinah Club, Chicago, Ill.

New York, N. Y. Annual meeting.
Oct. 5-7, 1937, Medinah Club, Chicago, Ill.
Engineering Division. — Frank McNellis
(Asst. Secy.), 59 E. Van Buren St.,
Chicago, Ill. Annual meeting, March
15-17, 1938, Palmer House, Chicago,
Ill. Exhibit by National Railway Appliances Association, March 14-17, International Amphitheatre, Union Stock
vards, Chicago, Ill.
Construction and Maintenance Section.
—Frank McNellis (Asst. Secy.), 59
E. Van Buren St., Chicago, Ill.
Annual meeting, March 15-17, 1938,
Palmer House, Chicago, Ill.
Electrical Section — Frank McNellis
(Asst. Secy.), 59 E. Van Buren
St., Chicago, Ill.
Annual meeting, March 15-17, 1938,
Palmer House, Chicago, Ill.
Signal Section.—R. H. C. Balliet, 30
Vesey St., New York, N. Y. Annual meeting, April 5-7, 1938,
Roosevelt Hotel, New Orleans, La.
Mechanical Division.—V. R. Hawthorne,
59 E. Van Buren St., Chicago, Ill.
Purchases and Stores Division.—W. J.
Farrell, 30 Vesey St., New York, N. Y.
Freight Claims Division.—Lewis Pilcher,
59 E. Van Buren St., Chicago, Ill.

N. Y.
Freight Claims Division.—Lewis Pilcher, 59 E. Van Buren St., Chicago, Ill.
Motor Transport Division.—George M.
Campbell, Transportation Bldg., Washington, D. C.
Car-Service Division — C. A. Buch, Transportation Bldg., Washington, D. C.

Car-Service Division — C. A. Buch, Transportation Bldg., Washington, D. C.

Finance, Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington, D. C.

Accounting Division. — E. R. Ford, Transportation Bldg., Washington, D. C. Annual meeting, 1938, Toronto, Ont.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington, D. C.

Traffic Derartment. — A. F. Cleveland, Vice-President. Transportation Bldg., Washington, D. C.

Association of Railway Claim Agents.—F. L. Johnson, Claim Agent, Alton R. R., 340 W. Harrison St., Chicago, Ill. Annual meeting, 1938, St. Louis, Mo.

Association of Railway Fiectrical Engineers.—Jos. A. Andreucetti, C. & N. W. Py., 1519 Daily News Bldg., 400 W. Madison St., Chicago, Ill. Annual meeting, October 27-28, 1937, Hotel Sherman, Chicago, Ill. Exhibit by Railway Electrical Supply Manufacturers' Association.

Bridge and Building Supply Men's Association.

Bridge and Building Supply Men's Association.

Bridge and Building Supply Men's Association.

Canadian Railway Club.—C. R. Crook, 2271

pany, 900 W. 18th St., Chicago, III. Mee's with American Railway Bridge and Building Association.

Canadian Railway Club.—C. R. Crook, 2271 Wilson Ave., N. D. G., Montreal, Que. Regular meetings, second Monday of each month, except June. July and August, Windsor Hotel, Montreal, Que.

Car Department Officers' Association —A. S. Sternberg, M. C. B. Belt R., of Chicago, Clearing, III. Annual meeting. September 28-29, 1937, Hotel Sherman. Chica-o, III. Car Foremen's Association of Chicago, III. Car Foremen's Association of Chicago, III. Regular meetings, second Monday of each month, except June, July and August, La Salle Hotel, Chicago, III.

Car Foremen's Association of St. Louis, Mo.—E. G. Bishop, Illinois Central System, East St. Louis, III. Regular meetings, third Tuesday of each month except June, July and August, Hotel Statler, St. Louis, Mo.

Central Railway Club of Buffalo.—Mrs. M. D. Reed. 1817 Hotel Statler, McKinley Square, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regular meetings, second Thursday of each month except June, Iuly and August, Hotel Statler, Buffalo, N. Y. Regul

N. Y.

International Railway Fuel Association. —
(See Railway Fuel and Traveling Engineers' Association.)

International Railway General Foremen's Association.—F. T. James (President), General Foreman, Delaware, Lackawanna & Western, Kingsland, N. J. Annual meeting, Sentember 28-29, 1937, Hotel Sherman, Chicago, Ill.

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International Railway Master Blacksmiths' Association.—W. J. Mayer, Michigan Central R. R., Detroit, Mich.

Master Boiler Makers' Association.—A. F. Stigmeier, 29 Parkwood St., Albany, N. Y. Annual meeting, September 29-30, 1937, Hotel Sherman, Chicago, Ill.

National Association of Railroad and Utilities Commissioners.—Clyde S. Bailey, 806-808, 13th and E. Sts., N. W., Washington, D. C. Annual meeting, August 31-September 3, 1937, Hotel Utah, Salt Lake City, Utah.

NATIONAL RAILWAY APPLIANCES C. H. White, Room 1826, 208 S. La Salle St., Chicago, Ill. Exhibit at A. R. E. A. Convention, March 14-17, 1938, International Amphitheatre, Union Stockyards, Chicago, Ill.

Ampinichere, Union Stockyards, Chicago, III.

New England Railroad Club. — W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Touraine, Boston, Mass.

New York Railroad Club. — D. W. Pye, 30 Church St., New York, N. Y. Regular meetings, third Friday of each month, except June, July and August, 29 W. 39th St., New York, N. Y.

Pacific Railway Club. — William S. Wollner, P. O. Box 3275, San Francisco, Cal. Regular meetings, second Thursday of each month, alternately at San Francisco and Oakland, excepting June at Los Angeles and October at Sacramento.

Railway Business Association.—P. H. Middle-

at Sacramento.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago, Ill.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 1941 Oliver Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY FLECTRICAL SURPLY MANUSCACTURES.

ASSOCIATION.—J. McC. Price. Allen-Bradley Company, 600 W. Jackson Blvd., Chicago, Ill. Meets with Association of Railway Electrical Engineers.

EWAY FIRE PROTECTION ASSOCIATION.—P. A. Bissell, 40 Broad St., Boston, Mass. Annual meeting, October 19-20, 1937, Hotel Cleveland, Cleveland, Ohio.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSO-CIATION.—T. Duff Smith, 1255 Old Colony Bldg., Chicago, Ill. Annual meeting, Sep-tember 28-October 1, 1937, Hotel Sherman, Chicago, Ill.

Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.

—J. D. Conway, 1941 Oliver Bldg., Pittsburgh, Pa. To meet with Mechanical Division and Purchases and Stores Division, Association of American Railroads.

Sociation of American Railroads.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with Telegraph and Telephone Section of A. A. R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 1438 Syndicate Trust Bldg., St. Louis, Mo. ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.—C. A. Lichty (Ass't Seey.), 319 N. Waller Ave., Chicago, Ill. Annual meeting, September 14-16, 1937, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with A. A. R., Signal Section.

Signal Section.

Society of Officers, United Associations of Railroad Veterans.—M. W. Jones, Baltimore & Ohio, Mt. Royal Station, Baltimore & Ohio, Mt. Royal Station, Baltimore, Md. Annual meetine, October 9-10, 1937, Hotel Richmond, Richmond, Va.

Southern and Southwestern Railway Club.—A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

Southern Association of Car Service Officers.—D. W. Brantley, C. of Ga. Ry., Savannah, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—D. W. Brantley, C. of Ga. Ry., Savannah, Ga.
TOOL FOREMEN SUPPLIERS' ASSOCIATION.—H. W.
Leighton (President), H. W. Leichton Company, 565 W. Washington St., Chicago, III.
Meets with American Railway Tool Foremen's Association.

men's Association.

TORONTO RAILWAY CLUB.—D. M. George, P. O.
Box 8, Terminal "A," Toronto, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION. — D. J. Higgins, Gardner-Denver Company, 332 S. Michigan Ave., Chicago, Ill. Meets with Roadmasters' and Maintenance of Way Asociation.

TRAYELING ENGINEERS' ASSOCIATION.—(See Railway Fuel and Traveling Engineers' Association.

Western Railway Club.—C. L. Emerson, C. M., St. P. & P., Chicago, Ill. Regular meetings, third Monday of each month, except June, July, August and September, Hotel Sherman, Chicago, Ill.

## **Equipment** and **Supplies**

# July Car Buying Tops June Record

While equipment activity lagged, car purchases ran ahead of previous month

July domestic rolling-stock orders of 3 locomotives, 1,030 freight cars, and 14 passenger-train cars carry 1937 totals to 231 locomotives, 46,120 freight cars and 470 passenger-train cars. These sevenmonth totals exceed in each category the record of the corresponding period of pending of, 750 cars at the close of the month.

Passenger-train car orders also showed an increase in July, being four cars over the June low of 10 units. The 14 cars bring the total for the first seven months of the year to 470 cars, which already exceeds the number ordered during the whole of 1936. As of July 31, a total of 9 cars was on the contemplated purchase

No orders for rail were booked during the month.

#### PASSENGER CARS

THE BOARD OF TRANSPORTATION, CITY of New York, has received bids for 100 new steel cars for the city's Independent Subway system. A low bid of \$41,950 a car was submitted jointly by the American Car & Foundry Company and the Pullman Standard Manufacturing Company. This was \$1,575 more per car than

#### Domestic Equipment Orders Reported in Issues of The Railway Age in July, 1937

#### LOCOMOTIVES

Date Name of C	ompany	No.	lype	Bunder
July 10 Chicago, Milw Pacific July 31 Newburgh &		1 2	4-8-4 0-6-0	Company Shops Lima Locomotive Works
	FRE	IGHT	CARS	
		1,000	Gondola	Company Shops
July 24 Hercules Power	ler Co	20	Tank	General American

July 31		TED TO	AIN CARS	Toungstown Steel Cal
July 24	Godfrey L. Cabot, Inc.	20	Cov. Hopper	American Car & Found Youngstown Steel Car

July 17	Southern Pacific	2	Tavern Coffee Shop	Pullman-Standard
July 24	New York Central	6	Dining Baggage-Mail	Pullman-Standard Pullman-Standard

1936, which saw the purchase of 131 locomotives, 31,029 freight and 181 passenger-train cars. In the case of passengercarrying equipment, 1937 thus far exceeds the record of the whole of 1936-307 cars. In the export field, American car and locomotive builders received no orders Canadian equipment companies in July. sold one locomotive and 30 freight cars for Dominion use.

The 3 locomotives purchased in July constitute a considerable decrease from the 9 units ordered in July of 1936 and a sharp drop from the 22 bought in June. In spite of the summer lull, however, the 7-months' total for the year exceeds that of the previous year by 100 units. At the end of the month there were contemplated purchases of 4 steam and 20 Diesel locomotives.

In contrast to the sharp falling off in locomotive buying during the month, the purchase of 1,030 freight cars in July almost doubles June orders for 528 cars, indicating an increasing demand for rolling stock in this category. And while this month's total is far below the 4,469 units ordered in July of 1936, as may be discerned above the 7 months' total for the year greatly exceeds the like portion of 1936's record. There were also inquiries outstanding for, and purchases the low bid offered on similar cars last March.

#### FREIGHT CARS

THE PEORIA AND PEKIN UNION has ordered 25 hopper cars from the General American Transportation Corporation. quiry for this equipment was reported in the Railway Age of July 31.

THE ILLINOIS CENTRAL has ordered 1,000 hopper cars, dividing the order equally between The Ryan Car Company and The Pressed Steel Car Company. Inquiry for this equipment was reported in the Railway Age of July 31. Pressed Steel will begin construction August 29 at the rate of 10 or 12 cars a day, while Ryan will start building August 18 at the rate of 20 cars a day.

#### IRON AND STEEL

THE WESTERN MARYLAND has ordered 2,000 tons of 90-lb. A.S.C.E. rail, from the Carnegie-Illinois Steel Corporation.

THE WABASH has ordered 6,500 tons of 112-lb. rail, placing 1,300 tons with the Inland Steel Company, 1,500 tons with the Bethlehem Steel Company and 3,700 tons with the Carnegie-Illinois Steel Corporation.

# **Supply Trade**

The Pettibone Mulliken Company, Chicago, was reorganized, effective July 1. Operations and personnel are continued by the Pettibone Mulliken Corporation, with the same headquarters.

Marvin Marsh, special Armco sales representative of the American Rolling Mill Company, Middletown, Ohio, with headquarters at Kansas City, Mo., has been promoted to manager of the newly created district office in that city.

Clarence D. Hicks, who has been elected vice-president of the Union Railway Equipment Company, Chicago, with headquarters at St. Louis, Mo., entered railway service as a special agent for the St. Louis Southwestern, from which position he later resigned to enter the employ of the supply department of the Missouri Pacific. Subsequently, he was employed in the mechanical, operat-



Clarence D. Hicks

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ing, engineering, traffic and executive de-During the War, he served partments. with the Federal Railroad Administration at Washington, following which he joined the staff of the federal regional director of the Southwestern region at St. Louis, remaining in that position until the end of federal control. At this time, he was appointed assistant to the president of the Missouri Pacific, which position he held until 1928, when he became special representative of the president on special duties in Old Mexico with headquarters at Mexico City, D. F. After completing this assignment in 1933, he returned to the United States and engaged in the railway supply business at St. Louis, Mo., which activities he will continue with his new appointment. Announcement of Mr. Hicks' appointment appeared in the July 24 issue of the Railway Age.

#### **OBITUARY**

Henry S. Demarest, president and treasurer of Greene, Tweed & Co., New York, died at his home in Hempstead, N. Y., on July 11, at the age of 70. He had been associated with the company since 1900, and before that date served with the Worthington Pump & Machinery Corporation.

#### **Financial**

Baltimore & Ohio.—R.F.C. Loan.— This company has applied to the Interstate Commerce Commission for authority to borrow \$5,000,000 from the Reconstruction Finance Corporation. The loan would mature on September 1, 1942, and would be used to retire \$4,427,000 of Buffalo, Rochester & Pittsburgh general mortgage five per cent bonds and \$573,000 of outstanding equipment trust certificates.

CENTRAL VERMONT.—Acquisition.—The Central Vermont Terminal, Inc., has applied to the Interstate Commerce Commission for authority to purchase the operating rights of the Central Vermont Transportation Company.

CHESAPEAKE & OHIO .- Joint Operation and Abandonment.-The Interstate Commerce Commission, Division 4, has authorized this company (1) to operate under trackage rights (a) over the line of the New York, Chicago and St. Louis between Erie Junction, Ind., and the point of connection with the New York Central at or near Seventy-third Street, approximately 10.89 miles, in Chicago, and also over a track of the Nickel Plate extending from the line above described to a connection with the Illinois Central at or near Eighty-third Street, approximately 0.09 mile, in Chicago, (b) over the line of railroad of the Illinois Central between Illinois Central Junction and South Water Street freight house, north of Randolph Street, approximately 9.93 miles, in Chi-cago, and (c) over the line of the Chicago & Western Indiana between its point of connection with the line of the Nickel Plate and its point of connection with the line of the Belt Railway of Chicago at Pullman Junction, approximately 0.35 mile, in Chicago. The commission has dismissed the application of this company to (2) abandon operation under trackage rights (a) e er the Erie between Erie Junction and Indiana-Illinois State line, approximately 0.43 mile, in Lake County, Ind., and (b) over the Western Indiana between Indiana-Illinois State line and Dearborn Station, at Polk Street, in Chicago, approximately 19.99 miles. This latter action was taken in view of the fact that the railroad had abandoned operations on these lines twelve years ago.

CHICAGO & EASTERN ILLINOIS.—Reopening of Reorganization Case.—The Interstate Commerce Commission, Division 4, has ordered that the reorganization proceedings of this company be reopened on September 9, in order that there may be received into the record pertinent portions of the evidence presented at the hearings of Senator Wheeler's subcommittee which is investigating the financing of railroads on May 11, 12, 13, and 14 and June 9.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—Abandonment.—The trustees have applied to the Interstate Commerce Commission for authority to abandon a line extending from Wauzeka, Wis., to La Farge, 52 miles.

MAINE CENTRAL.—Stock.—Stockholders have been notified of a special meeting August 25, at which they will be asked to ratify an increase of \$10,000,000 in the company's stock. The new issue is to be of prior preference shares, to be reserved for conversion of the road's general mortgage bonds.

Missouri Pacific.—Lease.—The Interstate Commerce Commission, Division 4, has authorized the trustee to lease the property of the Kiowa, Hardtner & Pacific.

New YORK, WESTCHESTER & BOSTON.— Receivers.—Edwin L. Garyin and James L. Dohr have been appointed receivers of this company by Federal Judge H. W. Goddard (New York), following the failure of reorganization under trusteeship under the federal bankruptcy law.

NORFOLK SOUTHERN.—Abandonment.— The Interstate Commerce Commission, Division 4, has authorized the receivers to abandon that portion of a branch line known as the Belhaven branch, extending from Mackeys, N. C., to Bishop Cross, 23.2 miles.

St. Joseph Union Depot.—Operating Contract.—Approval of a contract for the operation of this property at St. Joseph, Mo., is sought in a joint application filed with the Interstate Commerce Commission by the Atchison, Topeka & Santa Fe; the Chicago Great Western; the Chicago, Rock Island & Pacific; the Chicago, Burlington & Quincy; the Missouri Pacific; and the St. Joseph & Grand Island.

St. Louis-San Francisco.—Leave To File Plan Denied.—The Interstate Commerce Commission, Division 4, has denied the application of W. B. Stratton to file a plan of reorganization in the reorganization proceedings of this company.

St. Louis-San Francisco.—Purchase of Certificates.—Trustees of the St. Louis-San Francisco will, after August 16, 1937, purchase, at not more than face value, all past due equipment trust certificates matured up to and including December 31, 1936.

St. Louis-San Francisco.—Abandon-ment.—The Interstate Commerce Commission, Division 4, has authorized an extension of the time of abandonment of the line of this company between Fayette Junction, Ark., and Elkins, to September 30.

SHEARWOOD. — Abandonment. — The Interstate Commerce Commission, Division 4, has authorized this company to abandon its entire line extending from Nevils, Ga., to Egypt, 23.74 miles.

Southern.—Stock.—This company has announced to its stockholders that, at their annual meeting, to be held October 19, they will be asked to authorize the issuance of 2,900,000 shares of no-par common stock—1,298,200 to be exchanged sharefor-share for existing \$100-par common and the balance to be held in reserve for future sale to meet maturing obligations, thus reducing the company's loan capital.

Southern New Jersey.—Resumption of Operation.—This road has acquired and undertaken operation, effective August 3, for freight service only, of that part of the property formerly owned and operated by the Tuckerton extending from Barnegat, N. J., to Tuckerton, with a branch line between Manahawken and Hilliard. Freight will be interchanged between this road and the Central of New Jersey at Barnegat.

Southern Pacific. — Abandonment. — This road has applied to the Interstate Commerce Commission for a certificate authorizing the abandonment of the 2.07-mi. section of its Coalinga branch between Crump, Calif., and Le Roy.

SOUTHERN PACIFIC.—Acquisition.—The Interstate Commerce Commission, Division 4, has authorized the El Paso & Southwestern to acquire the properties of the Alamogordo & Sacramento Mountain and the El Paso & Northeastern.

Spokane, Portland & Seattle.—Equipment Trust Certificates.—The Interstate Commerce Commission, Division 4, has authorized this company to assume liability for \$1,200,000 of 234 per cent equipment trust certificates, maturing in 10 equal annual installments of \$120,000 on July 1, from 1938 to 1947. The issue has been sold at 102.222 to Paine, Webber & Co., and Estabrook & Co., of New York, making the average annual interest cost to the company approximately 2.3 per cent. The commission has also authorized the Northern Pacific and the Great Northern to assume liability as joint and several guarantors.

Texas & Pacific.—Abandonment.—The Interstate Commerce Commission, Division 4, has authorized this company to abandon its La Fourche branch extending from Donaldsonville, La., to Ratliff, 11.7 miles.

UNION ELECTRIC.—Acquisition and Securities.—The Interstate Commerce Commission, Division 4, has authorized this company to acquire and operate the property of the Union Traction. The commission has also authorized this company to issue \$287,000 of first mortgage income bonds, \$287,000 of 2 per cent noncumulative preferred stock, consisting of 5,740 shares of a par value of \$50 a share, and 2,500 shares of common stock of no par value in acquiring this property.

VIRGINIA CENTRAL.— Abandonment.— This company has applied to the Interstate Commerce Commission for authority to abandon its entire line extending from Orange, Va., to Fredericksburg, 38 miles.

#### Dividends Declared

Louisville, Henderson & St. Louis.—\$4.00, payable August 16 to holders of record July 31.

#### Average Prices of Stocks and Bonds

Average price of 20 representative railway stocks. 50.61 52.68 54.11

Average price of 20 representative railway bonds. 79.39 80.65 81.13

# Railway Officers

#### EXECUTIVE

Richard W. Wirt, assistant freight traffic manager of the Southern, with headquarters at Jacksonville, Fla., has been appointed assistant vice-president of the system, with headquarters at Washington, D. C., in charge of the industrial and agricultural department.

# FINANCIAL, LEGAL AND ACCOUNTING

Wilbur G. Hunt, auditor of the Atchison, Topeka & Santa Fe, with headquarters at Los Angeles, Cal., has been promoted to the newly created position of assistant general auditor, with headquarters at Topeka, Kan., and has been succeeded by James P. McDonald, auditor of disbursements at Topeka, who, in turn, has been succeeded by Clem O. Clark, assistant auditor of disbursements at Topeka.

H. T. Whipple, general attorney of the Erie, with headquarters at Cleveland, Ohio, has been promoted to assistant general counsel with the same headquarters, to replace M. B. Pierce, who has resigned to enter private practice, and has been succeeded by Paca Oberlin, general attorney. W. T. Pierson, valuation and commerce attorney, has been promoted to general attorney and J. P. Canny, assistant to the general attorney, has been promoted to assistant general attorney.

William G. Bruen, secretary of the Western Pacific, with headquarters at San Francisco, Cal., has retired effective July 31. He was born in Newark, N. J., in 1860 and in 1878 entered the employ of the Illinois Central, serving first in its auditing department in New York and then as assistant secretary at Chicago. After 30 years service with the Illinois Central, he resigned in 1908 to become secretary of the Western Pacific. From 1915 to 1916 he was employed by the Wabash and then returned to the Western Pacific to remain in continuous service until his retirement.

#### **OPERATING**

A. C. Bradley, division engineer of the Chicago, Rock Island & Pacific, with headquarters at Des Moines, Iowa, has been promoted to assistant superintendent, with headquarters at Minneapolis, Minn.

M. J. Wegener has been appointed acting chief special agent of the Great Northern, with headquarters at St. Paul, Minn., to succeed M. J. Lins, who has been granted a leave of absence.

R. H. Downes, acting assistant to the general manager of the eastern lines of the Atchison, Topeka & Santa Fe, with headquarters at Topeka, Kan., has been promoted to assistant general manager with the same headquarters to succeed E.

**A. Goeldner,** who has retired at his own request after 32 years service.

D. K. Price, superintendent of the Cincinnati division of the Louisville & Nashville, with headquarters at Latonia, Ky., has been transferred to the Louisville division, with headquarters at Louisville, Ky. to succeed W. O. Dilley, deceased, and has been succeeded by A. M. Stevenson, assistant superintendent, with headquarters at Louisville.

J. E. Kemp, trainmaster on the Denver & Rio Grande Western at Denver, Colo., has been appointed assistant superintendent of the Grand Junction division with headquarters at Grand Junction, Colo., effective July 22. L. T. Wright, chief dispatcher, has been appointed trainmaster with headquarters at Pueblo, Colo., to succeed Walter Allen, who has been transferred to Denver, succeeding Mr. Kemp.

H. R. Fegley, chief clerk to the superintendent of the Western division of the Western Pacific, has been appointed assistant to the general manager at San Francisco, Cal., succeeding C. E. McDonald, who has been appointed trainmaster at Wendover, Utah. M. McDonald succeeds L. D. Brady, who has been transferred to Portola, Cal., relieving C. E. Renner, who has been assigned to other duties.

H. B. Magill, who has been appointed superintendent of the Georgia division of the Railway Express Agency at A.lanta, Ga., as announced in the Railway Age of July 17, has had 33 years of service in the express business in the southwest and south. Starting as a driver at Brown-



H. B. Magill

wood, Texas, in July, 1904, he held various positions in that state, including agent and route agent. In September, 1917, after almost a year as station agent in San Antonio, he became chief clerk to the superintendent in that city. Two years later, he entered accounting work and served as district accountant at Kansas City, Mo., for seven years. Mr. Magill then went to Philadelphia as chief clerk to general auditor and during the next year, 1928, was appointed chief district accountant in the regional accounting department at Chattanooga, Tenn., which position he held until January, 1937, when he became division supervisor at Jacksonville, Fla., the



The Type E-2 Radial Buffer makes for safer and easier locomotive riding.

Its spherical and cylindrical faces permit movement in any direction, while

its predetermined frictional resistance dampens all oscillation between engine and tender and avoids all lost motion and subsequent destructive

shocks to drawbar and pins.

Its twin, the Franklin Automatic Compensator and Snubber, takes the job of maintaining proper driving box adjustment and further improves smoothness of operation, extends locomotive mileage and reduces maintenance costs.



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When maintenance is required, a replacement part assumes importance equal to that of the device itself and should be purchased with equal care. Use only genuine Franklin repair parts in Franklin equipment.



FRANKLIN RAILWAY SUPPLY CO., INC.

position he held until his recent appointment.

#### TRAFFIC

- W. J. Luchsinger, chief clerk to the assistant general freight agent of the Northern Pacific at St. Paul, Minn., has been promoted to assistant general freight agent, with the same headquarters, to succeed the late G. A. Mitchell.
- **G. F. Jones,** division freight and passenger agent of the Chicago, Burlington & Quincy, with headquarters at Casper, Wyo., has been promoted to executive general agent, with headquarters at Scottsbluff, Neb., and has been succeeded by **O. C. Wallace**, general agent, with headquarters at Scottsbluff.
- E. D. Wilson, general merchandise agent of the Kansas City Southern, with headquarters at Kansas City, Mo., has been appointed general development agent in charge of the agricultural and industrial departments, with the same headquarters, and has been succeeded by J. P. Gunther. H. W. Gilbert has been appointed assistant general freight agent with headquarters at Kansas City. W. D. Burch, commercial agent at Houston, Tex., has been appointed acting general agent at Shreveport, La.
- J. C. Kirk, first assistant general freight agent of the Nashville, Chattanooga & St. Louis, with headquarters at Nashville, Tenn., has been promoted to general freight agent, with the same headquarters, to succeed W. L. Nichol, deceased. F. L. Weiland, division freight agent at Nashville, has been promoted to assistant general freight agent, with the same headquarters, with jurisdiction over local solicitation and service at all stations other than Atlanta, Chattanooga, Nashville and Memphis. C. B. O'Connor has been appointed assistant general freight agent in charge of rates at Nashville.

#### ENGINEERING AND SIGNALING

- D. A. Kuebler has been appointed division engineer of the Northern division of the Kansas City Southern with headquarters at Pittsburg, Kan., to succeed W. J. Lank, assigned to other duties.
- T. A. Blair has been appointed district engineer of the Northern district of the Atchison, Topeka & Santa Fe, with head-quarters at La Junta, Col., to succeed L. G. Harris, assigned to other duties.
- A. R. Clark, general foreman, telegraph and signal department, Norfolk & Western, has been appointed supervisor of telephones and telegraph, with headquarters, as before, at Roanoke, Va. J. O. Trump, signal inspector, has been appointed general foreman, telegraph and signal department, at Roanoke.

Mason Rector, roadmaster on the Chicago, Rock Island & Pacific, with headquarters at El Reno, Okla., has been promoted to district maintenance engineer, with headquarters at Kansas City, Mo., to succeed W. E. Heimerdinger, who has been transferred to Des Moines, Iowa, to

replace L. J. Hughes, who has been appointed division engineer with headquarters at Des Moines to relieve A. C. Bradley, who has been promoted to assistant superintendent at Minneapolis, Minn.

M. W. Beach, whose appointment as bridge engineer of the Northern Pacific with headquarters at St. Paul, Minn., was reported in the Railway Age of July 24, has been in the employ of this company for 25 years. He was born on April 13, 1889, at Wolcott, N. Y., and was educated in civil engineering at the University of Michigan, graduating in 1911. He entered railway service with the Northern Pacific in November, 1912, as a draftsman and designer in the bridge department. September, 1916, Mr. Beach was advanced to assistant engineer in charge of the valuation of bridges, remaining in the valuation department until June, 1922, except for one year which he spent on construction work. At the end of this period Mr. Beach was appointed assistant engineer in the construction department and in November, 1928, he was promoted to assistant district engineer with headquarters at St. Paul. In March, 1937, following several years on special assignments, Mr. Beach was appointed acting bridge engineer, which position he held until his appointment as bridge engineer effective June 15.

#### MECHANICAL

W. L. Trout, general master mechanic of the Minneapolis & St. Louis, with head-quarters at Minneapolis, Minn., has been appointed superintendent of motive power and R. C. Goebel, assistant to the general master mechanic, has been appointed assistant to the superintendent of motive power, their previous positions having been abolished and the jurisdiction of the superintendent of motive power having been extended over the car department.

#### OBITUARY

Joseph E. Griffin, coal freight agent of the Pennsylvania, with headquarters at Chicago, died in that city on August 3.

A. L. Parmele, treasurer of the New York, Ontario and Western, and an employee of that company for 57 years, died on August 4.

John George McNab, general foreign freight agent of the Canadian Pacific, with headquarters at Montreal, Que., died suddenly on July 31 at the Montreal General hospital in his 58th year.

Harry F. Hunter, who retired as immigration and agricultural agent of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters in Chicago, in 1929, died on August 1 in South Haven, Mich. He entered the employ of the Milwaukee 40 years ago at Mellette, S. D., and at the age of 28 was elected to serve as a member of the first Dakota territorial legislature which convened in Bismark, now in the state of North Dakota.

William L. Nichol, general freight agent of the Nashville, Chattanooga & St. Louis, with headquarters at Nashville, Tenn., who died on July 25 following a

long illness, was born on January 5, 1872. He attended Wallace University School, Memphis University, Vanderbilt University and the University of the South at Sewanee, where he graduated in 1891. He entered railway service in the same year as a check clerk in the Atlanta office of the Nashville, Chattanooga & St. Louis and in June, 1892, was appointed rate clerk at Nashville. In 1897, he was made assistant local agent in direct charge of the Tennessee Centennial Exposition freight traffic at Nashville. At the close of the exposition he became a soliciting freight agent for the N. C. & St. L.; in 1899 he was appointed commercial agent at Chicago and in 1906 commercial agent at Nashville. In 1912, he was promoted to assistant general freight agent, which position he held until 1922, when he was promoted to general freight agent, the position he was holding at the time of his

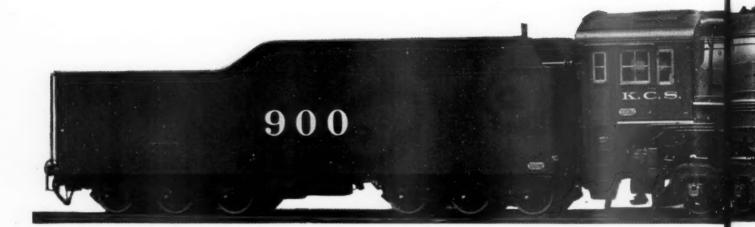
Russell C. Watkins, vice-president and general manager of the Louisiana lines of the Southern Pacific, with headquarters at New Orleans, La., died in that city on July 28. He was born on September 18, 1874, in Lowndes county, Ala., and received his education at the Agricultural and Mining College of Texas. He entered railway service on September 18, 1895, as section laborer and track-walker on the West Texas lines of the Galveston, Harrisburg & San Antonio. In April, 1896. he was transferred to the engineering department as a rodman and served in this capacity until November, 1896, when he was transferred to the track department as a student foreman in the Houston yards of the Texas & New Orleans. In February, 1897, he received a leave of absence from the Southern Pacific to become engineer for the Juarez Construction Company in Mexico and in that capacity had charge of the construction of a part of the line of the Rio Grande, Sierra Madre & Pacific in the state of Chihuahua. At the end of his leave of absence, Mr. Watkins assumed charge of the grade revision work on the Galveston, Harrisburg & San Antonio in the Rio Grande valley near El Paso, Tex., and was subsequently transferred to the Louisiana lines as engineer in charge of the construction on branch lines. He was promoted to acting division engineer at San Antonio, Tex., in 1900 and after serving in this capacity for several months was appointed office engineer, with headquarters at Houston, Tex. He was promoted to right-of-way agent of the Louisiana lines on January 1, 1904, which position he held until January 1, 1913, when he was promoted to acting division superintendent of the Houston division, with headquarters at San Antonio, Tex. He was promoted to division superintendent on July 1 of the same year. During the period of federal control he served as corporate maintenance engineer on the Louisiana lines and upon the termination of federal control continued in that capacity, preparing the claims against the director general of railroads for the Southern Pacific. He continued in this capacity until March 1, 1923, when he was promoted to vice-president and general manager, which position he has held until his death.

# REVENUES AND EXPENSES OF RAILWAYS MONTH OF JUNE AND SIX MONTHS OF CALENDAR YEAR 1937

				MONTH OF	F JUNE AND		OF CALEN	DAR YEAR 19	37				:		
A Name of road	Av. mileage operated during period	Freigh	Operating revenues	Total (inc. misc.)	Way and structures	nance ofOpe Equip- ment	perating expense Traffic p	Trans-	Total	Operating ratio	Net from railway operation	Operating	After deprec	depreciation—	Before de-
Akron, Canton & YoungstownJune 6 mos. AltonJune 6 mos.	171 171 956 956	3, 1,	\$39 233 204,683 1,157,406		\$28,706 164,086 270,760 1,036,910	\$18,983 103,555 221,860 1,247,920	\$10,275 58,011 47,370 292,691	\$52,076 336,186 525,232 3,122,463	\$118,885 719,035 1,128,276 6,105,313	70.1 63.3 83.8 75.0	\$50,723 416,482 218,109 2,038,918	\$41,351 330,869 115,358 1,407,251	\$22,036 192,811 —61,741 408,711	\$27,447 226,273 —15,569 —40,123	\$26,691 219,292 -32,363 584,597
Atchison, Topeka & Santa Fe SystemJune 6 mos. Atlanta & West PointJune 6 mos.	13,561 13,479 93	12,447,183 65,927,066 95,836 622,448	1,597,239 8,356,016 26,338 151,812	15,283,933 81,085,321 146,966 920,649	2,695,918 11,944,962 21,572 120,731	3,325,398 - 19,063,620 26,510 192,548	2,664,300 9,025 52,630	5,355,896 30,262,928 57,536 364,462	12,171,094 66,637,405 125,708 797,942	79.6 82.2 85.5 86.7	3,112,839 14,447,916 21,258 122,707	3,916,093 9,185,859 30,892 86,103	3,783,468 8,955,096 15,372 1,235	1,787,359 3,734,890 7,074 —26,514	4,732,452 14,586,022 23,882 53,070
Western of AlabamaJune 6 mos. Atlanta, Birmingham & CoastJune 6 mos.	133 133 639 639	95,808 600,884 230,971 1,606,256	25,683 148,963 7,866 132,139	138,710 855,216 278,361 1,946,486	16,422 113,852 53,532 308,458	33,950 215,133 56,883 333,289	8,103 47,262 24,479 144,412	49,494 314,822 113,452 738,881	118,103 751,738 281,971 1,692,983	85.1 87.9 101.3 87.0	20,607 103,478 3,610 253,503	30,337 53,717 -17,111 132,210	32,574 65,334 -27,789 18,194	4,043 2,159 -33,131 -57,381	44,611 138,792 —16,673 85,514
Atlantic Coast LineJune 6 mos. Charleston & Western CarolinaJune 6 mos.	5,103 5,102 342 342	2,804,016 19,348,136 203,861 1,284,621	408,027 5,154,051 1,499 7,041	3,557,890 27,258,434 210,580 1,326,563	402,366 2,479,882 30,365 173,425	787,428 4,660,284 35,449 196,797	136,720 865,045 7,239 42,847	1,434,052 9,862,982 61,824 411,085	2,911,689 19,088,756 141,027 856,739	81.8 70.0 67.0 64.6	646,201 8,169,678 69,553 469,824	296,201 4,994,678 50,553 338,324	3,899,445 41,939 293,662	2,170,622 23,831 211,195	289,379 4,917,217 48,140 330,898
Baltimore & OhioJune 6 mos. Staten Island Rapid TransitJune 6 mos.	6,471 6,471 23 23	12,370,158 77,290,529 50,678 321,927	1,114,071 5,496,783 70,717 414,058	14,504,624 88,011,669 131,427 783,196	1,703,648 8,599,630 16,752 76,219	3,799,788 20,866,199 23,085 135,085	396,765 2,430,879 1,561 10,669	4,881,020 30,148,849 79,858 490,714	11,422,148 66,178,562 131,843 784,721	78.8 75.2 100.3 100.2	3,082,476 11,833,107 —416 —1,525	2,469,562 16,174,874 —19,416 —128,525	2,019,618 13,763,860 -24,900 -169,655	2,477,890 12,114,255 45,758 -230,796	2,618,639 17,373,213 -17,482 -125,147
Bangor & AroostookJune 6 mos.  Bessemer & Lake EricJune 6 mos.	603 603 225 225	288,062 3,450,314 2,280,860 8,287,349	14,027 129,715 696 4,996	323,061 3,704,655 2,295,986 8,378,112	99,185 549,901 163,950 855,246	89,251 550,763 300,214 1,816,223	4,665 32,625 10,966 70,028	89,309 846,311 285,386 1,334,368	309,769 2,142,666 799,084 4,317,028	95.9 34.8 51.5	1,561,989 1,496,902 4,061,084	21,012 1,174,737 1,276,404 3,195,017		2,608 892,603 781,466 1,687,277	11,235,525 1,445,141 4,042,118
Boston & Mainefune 6 mos.  Burlington, Rock Islandfune 6 mos.	1,959 1,962 255 255	2,748,584 17,350,812 76,217 511,626	650,255 3,533,583 15,489 84,493	4,079,818 24,276,866 100,729 643,131	2,937,149 18,690 97,105	670,509 3,810,763 15,621 91,404	72,479 393,953 4,560 29,026	1,471,644 9,052,582 51,358 293,828	2,954,251 17,308,883 98,939 560,351	72.4 71.3 98.2 87.1	1,125,567 6,967,983 1,790 82,780	807,798 5,125,272 8,570 52,369	631,991 3,902,735 —7,828 —48,992	492,730 502,883 —29,133 —162,670	766,568 4,707,163 —5,969 —37,552
Cambria & Indiana	233	98,887 657,943 125,300 1,284,900	17,266 83,959	98,989 658,539 157,029 1,443,506	8,838 39,209 66,042 195,765	42,786 249,740 40,759 319,831	2,346 9,598 57,368	10,268 67,859 55,576 496,765	67,434 394,556 177,571 1,113,986	68.12 59.91 113.1 77.2	31,555 263,983 20,542 329,520	7,105 59,355 30,704 267,966	74,140 492,845 —61,382 128,034	68,373 348,258 —93,306 —69,664	90,848 594,395 —59,213 140,902
Canadian Pacific Lines in VermontJune 6 mos. Central of GeorgiaJune 6 mos.	85 1,926 1,926	73,373 484,440 1,047,213 7,065,705	7,916 51,701 118,122 723,706	94,289 605,474 1,329,150 8,818,346	16,946 81,985 208,622 1,159,532	26,177 172,768 312,924 1,760,079	4,266 25,499 56,272 332,254	57,564 368,393 562,029 3,493,420	108,906 682,886 1,221,211 7,261,933	115.5 112.8 91.9 82.4	—14,617 —77,412 107,939 1,556,413	-21,079 $-117,150$ $21,226$ $1,017,653$	—44,351 —240,811 3,827 797,485	-57,596 -370,375 13,195 268,092	-44,351 $-240,811$ $69,514$ $1,190,973$
Central of New JerseyJune 6 mos. Central VermontJune 6 mos.	681 681 455 455	2,100,564 13,573,176 427,063 2,859,720	395,429 2,147,470 39,844 219,859	2,724,447 16,791,667 511,145 3,347,924	238,610 1,212,774 90,749 398,637	2,975,928 89,519 608,045	45,578 277,477 15,989 91,875	1,117,329 6,779,709 220,997 1,499,145	1,988,941 11,898,554 439,447 2,735,800	73.0 70.9 86.0 81.7	735,506 4,893,113 71,698 612,124	375,540 2,565,766 47,341 466,159	1,575,507 1,575,507 10,693 231,267	47,202 595,952 4,039 —53,313	305,379 2,293,738 36,205 387,596
Chesapeake & OhioJune 6 mos. Chicago & Eastern IllinoisJune 6 mos.	3,106 3,106 930 930	9,103,293 59,438,898 948,794 6,551,587	338,056 1,673,815 127,170 716,975	9,888,804 63,478,417 1,236,656 8,231,743	1,091,994 6,779,067 189,901 949,653	1,825,198 11,346,179 256,355 1,418,508	1,146,454 1,146,454 59,326 351,644	2,358,071 14,771,410 499,511 3,118,982	5,755,639 36,171,624 1,075,182 6,256,235	58.2 57.0 86.9 76.0	4,133,165 27,306,793 161,474 1,975,508	3,244,549 19,642,754 96,474 1,460,508	3,210,520 19,930,821 30,473 618,282	3,785,880 22,788,405 35,571 393,592	3,901,808 24,052,624 21,443 921,912
Chicago & Illinois MidlandJune 6 mos. Chicago & North WesternJune 6 mos.	131 131 8,400 8,402	285,222 1,889,078 5,724,707 32,494,805	1,206,776 5,472,438	295,042 1,942,326 7,760,631 42,432,390	31,877 157,395 2,069,461 7,314,153	69,749 407,609 2,234,635 11,619,262	16,491 104,977 201,543 1,090,115	77,205 490,504 2,972,192 17,779,854	213,774 1,274,425 7,809,542 39,911,501	72.5 65.6 100.6 94.1	81,268 667,901 -48,911 2,520,889	61,667 509,855 870,056 9,397	57,774 465,685 727,292 -1,007,828	80,946 456,384 158,922 -1,570,468	71,398 547,363 1,141,514 1,473,406
Chicago, Burlington & QuincyJune 6 mos. Chicago Great WesternJune 6 mos.	8,976 8,976 1,505 1,505	5,740,377 37,301,529 1,291,786 8,200,734	851,874 4,200,846 45,138 261,205	7,470,216 46,500,905 1,436,874 9,019,258	1,749,412 6,760,361 278,846 1,468,404	1,549,059 9,001,800 227,598 1,506,364	261,083 1,493,562 55,876 350,589	2,788,940 17,459,345 534,564 3,510,513	6,584,191 36,875,985 1,154,967 7,167,292	88.1 79.3 80.4 79.5	886,025 9,624,920 281,907 1,851,966	1,657,590 6,760,529 218,851 1,312,734	1,346,297 4,757,906 33,426 145,956	263,655 3,221,621 197,111 266,784	1,749,969 7,165,305 78,293 410,379
Chicago, Indianapolis & LouisvilleJune 6 mos. Chicago, Milw., St. Paul & PacificJune 6 mos.	575 11,113 11,114	634,305 4,262,745 7,266,048 42,724,991	46,072 311,101 756,085 3,713,270	790,477 5,179,553 8,989,601 51,680,315	87,208 524,753 1,898,356 7,960,891	215,221 1,242,209 1,692,750 10,553,953	29,547 176,435 248,034 1,335,917	326,852 2,092,269 3,383,188 20,463,174	693,962 4,262,703 7,602,124 42,464,945	87.8 84.6 82.2	96,515 916,850 1,387,477 9,215,370	195,791 774,255 2,379,477 6,619,015	116,884 179,315 2,000,145 4,361,639	-4,758 88,184 316,788 2,123,177	153,858 401,511 2,455,667 7,077,385

Aug

# NEW HEAVY POWER FOR THE KA

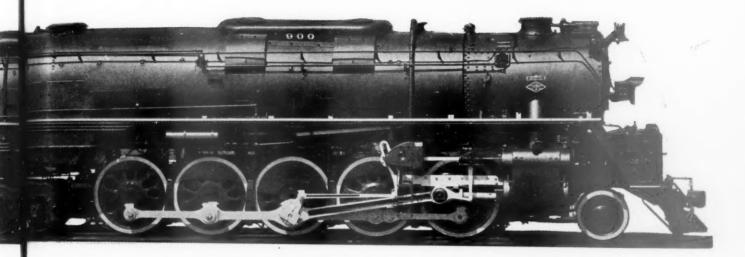


	WEIGHTS IN	WORKING OR	DER, POUNDS	
On Drivers	Eng. Truck	Trailer Truck	Total Engine	Tender Loader
350,000	50,600	Front 53,200 Rear 55,200	509,000	348,000
	WHEEL BASE		TRACTIV	VE EFFORT
Driving	Engine	Eng. & Tender	9:	3,300
24' 4"	48' 8"	98' 5"		
ВОІ	LER	CYLIN	DERS	DRIVING WHEEL
Diameter	Pressure	Diameter	Stroke	Diameter
92"	310 lb.	27"	34"	70"



LIMADO

# KANSAS CITY SOUTHERN RAILWAY



PORT ARTHUR ROUTE

The first of ten heavy 2-10-4 Type locomotives (5 oil burning, 5 coal burning) recently delivered by Lima to the Kansas City Southern Railway.

This power is designed to meet the requirements of high capacity, high speed freight service.

COMOTIVE WORKS, INCORPORATED OHIO

REVENUES AND EXPENSES OF RAILWAYS MONTH OF JUNE AND SIX MONTHS OF CALENDAR YEAR 1937—CONTINUED Operating expenses-

Pacific Grands G	June 6 mos. 6 mo	49-01	Freight 5,553,271			Way also	ment	Traffic p	portation	ratio ratio	0	eration	4		\$5,816 \$1	\$1,679,835
St. Paul, Minneap. St. Paul, Minneap. St. Southern St. Southern Worth & Denver Cit. Us & Greenville re & Hudson re, Lackawanna & W	Omaha June 6 mos. 6 mos. 6 mos. 6 mos. 6 mos. 7 June 6 mos. 6 mos. 6 mos. 6 mos. 7 June 6 mos. 6 mos. 6 mos. 7 June 6 mos. 6 mos. 6 mos.			\$614,799 \$ 3,701,692 3	\$6,690,037 \$136,736,598	49-	,797,512 35,538	1000		32,539,896 32,539,896 314,868 7	87.1 888.6 78.6 72.3	859,779 196,702 85,486 633,257	2,407,214 2,407,214 130,352 551,043	671,102 —1,9 64,795 157,798	29,958 2, 39,620 84,200	,701,463 68,345 179,809
Railroad  Railroad  Southern  & Greenville  & Hudson  Lackawanna & W	Dimana , June		791		2,288,085	327,481	840 077 831	736			104	19,233 472,343 221,805	211,810 102,016 176,205	106,738 -524,779 199,505 1,642,635	220,056 -229,725 156,913 ,224,998 1,	156,246 223,374 858,328
& Southern Vorth & Denver Cit.  & & Greenville  e & Hudson  e, Lackawanna & W	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		6,798,358 522,687 3,527,357	777,871 4,299 25,126	8,105,078 533,548 3,590,351	259,226	120,863 706,105	112,630	-	306	20 00	40	00 0	145,198	4,147	176,529 546,117
& Greenville  & Hudson	ern.		557,826 3,186,669 822,504	34,119 182,308 53,393	3,702,088 853,865	89,508 371,554 51,801	150,553 771,326 96,273 544,112	13,944 82,470 20,394 107,513	1,495,450 2 218,383 1,072,851 2	,921,669 421,985 ,213,938	78.9 49.4 65.7		477,548	795,371	341,402	898,250
& Hudson	ern.		3,172,846 79,687 557,610	1	91,650	23,547 135,925 382	14,036 89,258 524,532	4,170 25,317 48,879	36,256 224,292 724,621	88,722 538,320 1,753,939	96.8 84.2 84.2 77.3	2,928 101,392 328,322 3,039,621	241,632 241,632 2,153,956	25,687 228,399 2,104,998	11,692 218,295 ,159,086 2	20
e, Lackawanna & W	ern		12,375,369	77,605 516,950 598,880	13,402,334	1,605,281	2,975,911 730,409 4,589,510		-	247		1,069,904 6,624,638 162,693	644,904 4,009,638 101,067	\$84,097 3,879,410 64,250	2,643,749 2,643,749 239,776 —113,631	793,479 5,141,028 159,331 55,363
Denver & Rio Grande Western		984 2,576 2,576	20,021,696 1,719,786 10,908,422	3,426,842	12,203,918	678	3,765,472	1	-		- 200	19,136	38,405	9,571	361,545	17,445 462,448 6.714
Denver & Salt Lake	June 6 mos.	232	1,167,717	6,057 39,988 2,813	1,264,002	46,323 200,479 15,708	50,108 317,296 20,826 87,153	14,405 710 5,743	375,267 25,269 151,354	937,289 65,854 333,812	74.2 89.6 79.3	7,664	5,888	2,066 40,183	984	58,196
Detroit & Mackinac	9	242	365,168 238,761 2,034,690			26,398	24,156 139,099 79,982	7,491 48,067 11,399	70,920 494,223 136,626	137,216 879,539 328,353	57.2 57.2 57.2 57.5	1,169,673 245,524 2,263,972	92,700 962,917 192,428 1,836,788	623,403 623,403 136,341 1,460,076	613,123 166,815 1,498,826	659,39 157,19 585,45
, Toledo &	o mos. June 6 mos.	472	547,321		4,312,92	467,602	500,375	1,866	528,365	1,123,876	3.1	3,441,629 6,456,512	3,428,660 5,095,717	5,086,832	1,595,815	3,497,393 5,478,475
	June 6 mos.	537	3,977,715 9,861,600 110,226	14,284	11,349,748	1,069,285	1,549,685 17,108 111,463	23,868 2,204 12,228	1,966,961	569,623	82.6	163,450	107,472	100	24,925	51,443
, Winnipe	6 mos.	178	1			18	1	12,639 87,037	683,005 4,125,649	1,325,786 7,910,962 5,127,121	68.8	3,865,312 1,894,933	3,255,713 1,487,907 10,108,220	2,538,301 1,182,425 8,324,251	1,853,659 1,349,811 7,235,662	2,982,442 1,499,719 10,230,042
Elgin, Joliet & Eastern	6 mos. June 6 mos.	2,277	10,325,272 5,825,774 37,535,363	450,235	7,022,054	60	4,80	1,038	13	30,168,490	10.	6,622	12,485	27.048	24,778	27,037
New Jersey & New York.	June 6 mos.	245	14,172 97,612 97,612	45,522 270,553 25,216		30,077	13,571 91,680 29,342	3,170 3,843 25,501	284,244 105,412 695,175	418,910 175,548 1,094,644	109.9 73.2 62.4	37,650 64,322 658,915	36,089	200	237,263	301,171
New York, Susq. & Western	9		- "	-	1,753,3			139	1,833,398	498,858 3,850,287 56,858	107.6 65.6 108.3 87.6	2,022,990 2,022,990 49,137	1,547,916 1,547,916 40,320	1,188,865 1,188,865 1,12,122 7,454	997,111 997,111 7,042 7,593	1,421,748
Fort Smith	6 mos. June 6 mos.	249			397	95		38		265	89.2	31,953	91,197	104,914	278,895	115,649 481,472 835
penuit Georgia Railroad	June 6 mos.	329	254,517	16,01 85,15 2,57	2 297,100 2 1,910,656 72 1,06,385	38,228 6 183,924 5 25,330	359,344 20,529 110,893	113,235 8,256 51,323	780,395 40,205 236,225	1,522,012 100,096 579,852	94.1	6,289		-9,02	2 2	22,187
ue Georgia & Florida	6 mos.	1		93	0 640 0 2,035 7 13,007	1,444	381,97 2,320,64 23,98	233	787,747 4,984,775 4,088,227	1,568,720 9,506,316 137,463	77.1 73.1 103.7 99.0	3,501,312 -4,960 7,373	327,085 2,705,994 —19,901 —82,272	219,958 1,822,005 49,572 262,716	382,505 2,215,521 	2,330,654
Canadian Nat'l	New EngJune 6 mos.	172	2 645,599	31	742		133,	14	1	r,	59.2	3,716,773	3,846,133	3,805,357	2,570,998 6,809,260	4,107,909
page Great Northern	June 6 mos.	e 8,093	13 7,634,08 13 35,133,27	85 544,182 72 2,289,156	9,120	,930 4,587,242	7 1,358,847	3 1,148,433	3 14,348,782	29,282,	111/	3				

#### NO. 26 OF A SERIES OF FAMOUS ARCHES OF THE WORLD



#### GATE OF DOLMA-BAGTCHE, ISTANBUL

This arched gateway is the main entrance to the famous Palace of Dolma-Bagtche, built by Abd-ul-Mejid in 1853 on the site of the ruins of an old palace. Dolma-Bagtche, called the "Pearl of the Bosphorus", is of white marble and the vastest palace in the Ottoman Empire. It was designed by Bolian, an Armenian Architect, whose instructions were to "complete an edifice that surpassed every palatial dwelling that any Sultan anywhere had ever beheld." Variety and ostentatious prodigality are its prominent character-

istics. This palace became the residence of three successive Sultans, Abd-ul-Mejid, Abd-ul-Aziz and Mourad V. » » The Security Sectional Arch for the locomotive firebox improves fuel economy on any locomotive. It has had a major influence in firebox design of large modern power and is essential to their successful operation.

THERE'S MORE TO SECURITY ARCHES THAN JUST BRICK

HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists

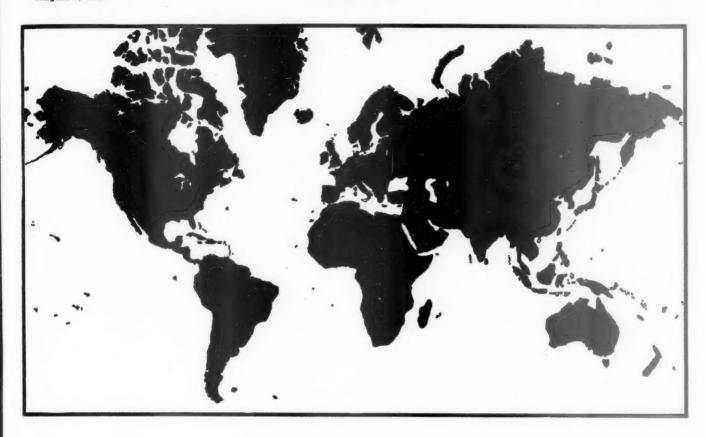


AMERICAN ARCH CO.

Locomotive Combustion Specialists » » »

REVENUES AND EXPENSES OF RAILWAYS
MONTH OF JUNE AND SIX MONTHS OF CALENDAR YEAR 1937—CONTINUED

			OW	ONTH OF JUN	E AND SIA P	TO SHINOT	ALENDAR A	EAR 1757	CALINCED						
15	Av. mileag		Operating revenues	nues	Mainte	nance of-	Operating expense	Trans.		Onerating	from	Onerating	Net railway	ailway operating	r income
Name of road	period	Freight	Passenger	(inc	structures		Тгаяс	portation	Total	ratio	operation	income	1937	1936	preciation
Green Bay & WesternJune 6 mos. Gulf & Ship IslandJune 6 mos.	234 234 c 259	\$142,241 812,035 104,255 674,981	\$693 3,719 10,946 53,576	\$147,974 842,899 133,630 830,804	\$37,369 189,203 24,193 128,003	\$16,410 105,390 18,332 101,404	\$6,288 38,095 2,887 19,009	\$44,612 279,360 54,665 374,236	\$109,767 637,044 104,365 657,834	74.2 75.5 78.1	\$38,207 205,855 29,265 172,970	\$29,395 144,606 29,044 83,882	\$19,556 110,096 19,347 23,673	\$15,558 87,101 -28,032 -36,382	\$24,305 138,752 23,177 47,805
Gulf, Mobile & NorthernJune 6 mos. Illinois CentralJune 6 mos.	e 936 6 4,957 e 4,957 6 4,961	531,389 3,526,974 6,086,182 39,603,618	25,956 152,594 837,099 4,803,708	3,825,787 7,585,421 48,695,337	86,730 473,878 961,144 5,040,834	78,125 536,541 1,958,717 10,683,933	39,850 228,597 195,527 1,289,919	1,022,545 3,061,409 19,669,059	409,168 2,458,543 6,537,117 39,213,827	70.21 64.27 86.2 80.5	173,519 1,367,028 1,048,304 9,481,510	204,766 1,101,275 1,937,714 6,771,047	141,599 713,207 1,715,678 5,446,514	110,428 578,785 773,612 5,276,905	162,582 828,525 2,229,956 8,588,108
Yazoo & Mississippi ValleyJune 6 mos. Illinois Central SystemJune 6 mos.	e 1,619 e 6,576 e 6,581	1,119,473 6,880,539 7,205,655 46,484,157	89,053 465,324 926,152 5,269,032	1,289,446 7,884,895 8,874,867 56,580,232	119,365 664,754 1,080,509 5,705,588	216,984 1,230,818 2,175,701 11,914,751	31,556 208,606 227,083 1,498,525	2,940,581 3,537,256 22,609,640	894,100 5,395,533 7,431,217 44,609,360	69.3 68.4 83.7 78.8	395,346 2,489,362 1,443,650 11,970,872	447,001 1,783,075 2,382,850 8,541,936	368,850 1,337,472 2,093,528 6,841,286	168,392 612,936 953,266 5,942,203	409,529 1,581,933 2,648,485 10,227,341
Illinois TerminalJune 6 mos. Kansas City SouthernJune 6 mos.	504 504 878 878	398,344 2,454,120 981,520 6,049,006	66,619 429,237 22,087 107,013	507,193 3,122,344 1,124,802 6,821,197	55,447 299,611 113,379 704,064	74,598 450,096 166,415 1,004,493	15,775 96,673 50,618 300,758	1,009,348 328,578 2,031,933	320,960 1,973,895 726,654 4,455,084	63.28 63.22 64.6 65.3	1,148,449 398,148 2,366,113	134,046 866,177 310,148 1,750,113	114,378 720,088 249,407 1,410,553	114,481 743,969 306,290 1,470,035	133,392 833,067 284,496 1,612,172
Kansas, Oklahoma & GulfJune 6 mos. Lake Superior & IshpemingJune 6 mos.	326 326 156	178,498 1,076,937 329,772 1,117,144	3,264 93,748	1,096,005 389,478 1,309,325	39,343 143,510 42,686 169,719	14,932 89,897 24,086 159,705	8,765 52,903 880 4,365	42,636 253,038 54,887 249,003	69,652 538,961 129,703 622,569	38.3 33.3 47.5	112,125 557,044 259,775 686,756	91,212 436,773 202,339 459,576	70,131 329,111 202,694 462,944	63,744 378,516 248,830 202,814	72,225 341,671 217,915 546,052
Lehigh & Hudson RiverJune  6 mos.  Lehigh & New EnglandJune 6 mos.	96 9215 215	134,841 840,707 271,354 1,962,158	670 1,147 263 1,389	136,240 845,985 274,072 1,977,570	22,433 86,698 38,805 192,018	18,603 133,672 72,529 418,590	3,979 23,729 6,577 39,509	46,649 289,414 103,701 702,637	98,678 578,824 238,082 1,449,949	72.4 68.4 86.9 73.3	37,562 267,161 35,990 527,621	24,650 182,094 68,519 444,609	13,629 108,242 75,359 469,611	7,664 69,791 39,169 392,801	17,240 130,226 94,486 586,476
Lehigh ValleyJune 6 mos. Louisiana & ArkansasJune 6 mos.	1,322	3,579,648 23,064,507 435,456 2,731,052	214,857 1,292,939 9,695 52,546	4,092,260 25,934,239 460,929 2,886,089	393,074 1,824,956 59,756 387,585	953,085 5,271,607 66,619 410,325	106,546 680,017 31,724 186,609	1,705,444 10,913,001 129,884 837,123	3,321,339 19,697,820 308,767 1,953,444	81.2 76.0 67.0	770,921 6,236,419 152,162 932,645	484,279 4,509,986 111,224 716,919	3,236,046 94,222 571,328	3,614,129 122,529 663,409	494,336 4,366,523 109,171 662,930
Louisiana, Arkansas & TexasJune 6 mos.  Louisville & NashvilleJune 6 mos.	255 4.940 4,941	113,491 617,550 6,548,372 38,856,794	217 1,150 578,039 3,367,633	118,794 646,640 7,673,451 45,482,858	22,044 126,009 853,079 4,760,897	11,788 65,126 1,765,710 10,111,564	5,136 28,865 193,880 1,146,592	39,892 237,048 2,628,390 15,791,230	80,914 486,711 5,732,235 33,721,308	68.1 75.3 74.7 74.1	37,880 159,929 1,941,216 11,761,550	32,859 129,283 1,281,475 7,720,150	17,453 28,301 1,349,612 8,293,128	12,567 35,034 1,535,077 8,141,764	18,279 33,210 1,693,031 10,374,752
Maine CentralJune  Midland Valleyfune 6 mos.	1,009 1,009 351 351	788,840 5,636,633 113,356 671,571	95,433 465,529 59	994,268 6,577,198 115,338 685,134	196,711 978,605 20,817 93,170	182,200 1,082,450 12,090 67,999	10,786 71,794 2,448 15,493	342,693 2,216,660 28,673 178,587	765,896 4,588,470 70,190 393,491	77.0 69.8 60.9 57.4	228,372 1,988,728 45,148 291,643	1,570,828 36,372 235,040	137,028 1,214,846 30,080 188,643	22,959 382,166 15,730 202,812	1,476,992 32,220 201,491
Minneapolis & St. LouisJune Minneapolis, St. Paul & S. S. MarieJune 6 mos.	1,530 1,530 4,301 4,301	595,026 3,590,786 1,911,294 11,217,811	10,196 64,420 146,803 578,375	637,147 3,861,080 2,265,554 12,816,436	120,903 561,336 463,469 1,872,583	115,609 696,017 385,576 2,443,184	40,801 250,439 61,965 362,829	266,925 1,736,444 888,423 5,518,550	581,144 3,472,341 1,897,756 10,814,500	91.2 89.9 83.8 84.4	56,003 388,739 367,798 2,001,936	172,072 296,940 627,675 1,573,219	123,387 1,791 491,749 801,765	160,064 200,533 347,403 302,068	149,577 158,482 572,184 1,392,754
Duluth, South Shore & AtlanticJune 6 mos. Spokane InternationalJune 6 mos.	549 549 163	211,186 1,223,161 64,594 347,818	14,536 83,420 1,385 8,366	251,972 1,419,745 72,301 391,177	46,686 203,876 20,821 93,487	51,444 255,552 8,299 44,559	4,714 27,168 2,120 12,659	88,458 536,646 22,014 138,841	201,140 1,071,933 57,290 321,075	79.8 75.5 79.2 82.1	50,832 347,812 15,011 70,102	80,536 311,733 22,732 53,168	70,087 251,223 18,266 30,255	138,014 273,106 10,493 20,901	77,303 294,785 19,903 40,077
Mississippi CentralJune 6 mos. Missouri-Arkansasfune 6 mos.	150 150 364 364	70,231 422,646 76,980 507,941	2,246 12,604 1,107 6,893	74,773 449,674 83,884 548,502	21,525 112,948 27,358 150,918	11,589 70,282 11,913 67,784	7,216 41,632 6,151 35,269	20,924 130,173 30,789 200,828	66,755 386,858 80,485 480,391	89.3 86.0 95.9 87.6	8,018 62,816 3,399 68,111	3,218 33,841 1,697 47,271	5,389 -7,209 -10,421	12,824 61,557 5,729 37,303	1,414 18,756 6,167 4,770
Missouri-IllinoisJune 6 mos. Missouri-Kansas-Texas LinesJune 6 mos.	205 205 3,293 3,293	129,987 714,147 2,371,210 12,704,724	3,592 219,994 1,123,771	133,225 730,021 2,864,031 15,275,501	23,974 142,163 333,419 1,820,548	13,444 75,800 377,574 2,346,760	2,855 16,542 120,025 728,045	37,572 222,012 992,408 5,717,007	80,534 488,464 1,965,383 11,495,380	60.4 66.9 68.6 75.3	52,691 241,557 898,648 3,780,121	46,070 201,794 695,694 2,919,434	32,179 116,856 474,804 1,627,082	17,086 29,101 183,523 776,088	35,207 135,033 573,730 2,219,220
Missouri Pacific June 6 mos.	7,171	5,933,635 38,696,484	444,466	7,045,073	1,191,620 6,083,499	1,428,696	249,015	2,552,043	5,692,386	80.8	1,352,687 10,128,038	881,392 7,155,730	430,447	3,449,465	776,915



# Elesco Types of Feed Water Heating Equipment

# Dot the World

# THE SUPERHEATER COMPANY

Representative of American Throttle Company, Inc.

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Superheaters
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In practically every country in the world you will find applications of Elesco types of feed water heating equipments . . . either the single stage exhaust steam injector type, or the closed type equipped with a single pump.

Some railroads prefer the injector type and some the other type. Either type effects an increase in the evaporative capacity of the locomotive boiler. If the increase in capacity is not used, there will be a substantial reduction in the fuel and water rate.

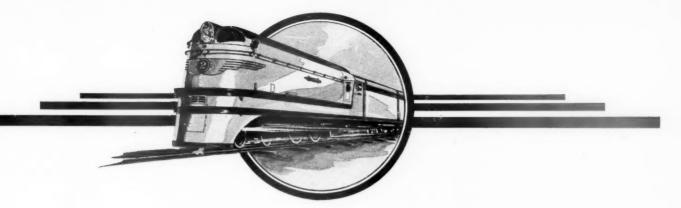
Investigate the possibilities of Elesco feed water heating equipment on your locomotives.

DEPENDABLE ECONOMICAL EFFICIENT Net railway operating income

\*

REVENUES AND EXPENSES OF RAILWAYS
MONTH OF JUNE AND SIX MONTHS OF CALENDAR YEAR 1937—CONTINUED Operating expenses-

					Mount	OP THE	AND SIX MON	THE OF C	ALENDAR YEAR	1937—Con	TINUED		Net		Net railway	operating inc	meonie
		Av. mile	age	Operating	514		Main	tenance of Fauin	expens	Trans-	Total r	Operating	from railway O	Operating Income	0	[ :	preciation
	-	during period	Fre	D.	nger (	sc.)	\$202,759 \$1.114,241	ment \$195,653 1,212,413	\$46,435 279,731	\$338,164 \$2,479,159 432,450	41189	0.0	\$161,032 3,908,757 175,460	\$92,398 ,465,016 ,120,117 727,249	\$11,981 479,266 21,513 20,732	\$93,943 778,246 2, -15,461	53,907 213,646
	Gulf Coast LinesIu International Great Northernfu	mos. 1,154 mos. 1,154		8,652,689 837,894 5,334,939	87,575 87,575 513,215		156,555	1,202,823			239			191,019	119,435	52,613 265,482 1,	169,736 1,024,720 86,353
N	Mobile & OhioIv	June 1,194 mos. 1,197	n,	936,991 ,555,142 342,305	34,666 183,489 1,283	1,029,296 6,102,410 349,431	134,496 733,671 40,458	1,118,801 26,272 175,918	258,578 455 2,811	2,237,152 475,397 499,677	4,630,003 145,670 949,644	41.7		1,137,746			674,026
N IN	Monongahela 6 m	1		2,271,729		254,514	17,035	339	63,691	52,628 299,521 454,822	120,795 676,009 1,039,265 6,248,601	47.5 92.2 83.2	133,719 525,648 88,400 1,262,729	365,415 49,497 816,261	506,639 37,601 715,287	381,107 41,293 384,214	581,773 80,808 969,740
4 1	ashville, Chattanooga & St. Louis	June 1,117 mos. 1,119		50,677	603,893 603,893 640 8 879	7,511,330 56,016 335,977		3,714 23,839		7,066 65,910 035,955	27,282 174,155 23,624,331	48.7 58.1 76.2	28,734 161,822 7,378,127 47,032,776	19,634 108,398 2,475,126 30,252,806	21,942 117,430 1,229,247 2,575,194	12,233 89,280 89,280 239,983 2,688,552 30,	153, 566, 582,
	New York Central	ne 1 0s. 1		21,345,181 134,792,140 3	6,061,383	31,002,458 186,831,954 2,105,949	200	39,596,358		605,007	1,620,872	000	2,384,681	1,274,568 1,274,568 952,302	318,965 319,485 707,560	489,819 2,176,036 657,484 4 157 446	473,150 3,196,991 845,532 5,171,589
	Pittsburgh & Lake Erie6	ine os.	233 11, 233 11, 1,704 3,	11,725,319	343,727 84,494 412,388	12,443,383 3,391,788 21,885,050	961,405 411,887 2,268,474	3,386,753	115,027	1	515	65.5	7,544,596	6,064,128	440,490	452,594	725,037
	ew York, Chicago & St. Louis.			839,554		6,821,447	1 m 4	1,236,895	0,0	2,578,913 15,642,240 28,277	5,334,171 30,978,956 53,473	25.50	10,306,390 158,720 1.160,304	7,341,390 121,050 935,064	3,714,896 97,269 794,868	2,003,412 90,781 669,425	
			2,034 24, 20 1,	24,082,710 198,721 1,384,803		1,457,26			12,604	246,546	481,194	92.0	41,635	9,725	-19,542 8,806 774,887	102,523 535,496 2,585,984	3,764 152,348 3,179,951
	New York, Ontario & Western	June 6 mos.	576	432,162 3,031,193 7,555,648	36,099 91,964 188,576	3,423,875	316,569	762,577 1,503,506 8,511,925	125,550	1,751,561	4,330,695	54.1	3,670,331	-	16,441,219 1	2,	239,53
	& Western		203	672,724	7,299	695,8	,		23,903 137,007 195,010	187,607 904,530 1,916,180	391,784 1,939,941 4,577,901	56.3 74.1 83.7 85.0	304,072 677,250 889,744 4,550,761	475,208 1,366,646 2,179,995	330,632 1,684,088 4,258,990	155,966 544,987 1,454,822	1,952,546 5,869,313
	Northern Pacific	mos. June mos.	6,726 4 6,726 25	4,464,582	2,103,322	30,399	6.3	1	1,0	=	a	93.0	22,338	6,444	-2,316	36,640	11,106 14,532 10,696
	Northwestern Pacific	.June		218,203	75,219	319,852 1,807,446 43,949	58,950 322,566 5,647	325,563	26,351 914 4,748	974,417 11,386 67,677	1,730,175 23,457 167,383	53.4	20,492	75	35,440	92,769	1
	klahoma City-Ada-Atoka	June 6 mos.	132	40,950	2,561	260,42	71,70		666,40	13,822	129	73.7	10,450,313	6,677,914	6,164,913 35,609,199	6,673,164 34,993,966 191,240	8,249,163 47,985,569 82,831
	Pennsylvania	-	0,308	29,652,074 178,182,097 472,021	5,838,273 35,073,155 1,570,449	234,499,503	25,549,35	5 51,967,888 399,582 4 2,472,297	4,012,059 18,025 104,889		1,659,462	833	2,037,391			159,323	-120
	Long Island Banding Seashore Line	mos.	396	3,412,068	00	2,671,477 1 2,671,477	86,39	-	16,446 68,557 1 67,517	297,856 7 1,618,061 7 927,180	503,085 2,861,874 2,065,444	88.9 107.1 80.5 75.1	62,834 —190,397 501,571 4,061,208	657,865 444,919 3,074,296	-1,141,031 345,136 2,560,460	983,973 316,363 2,627,448	1,042,840 558,640 3,839,643
Conti	Pere Marquette	6 mos. 5 mos.	2,115	2,303,177	438		2,02	6	397	1	4		11,455	7,147	9,188	-10,821 -13,800 98,951	13,250 39,356 173,620
inued	Pittsburg & Shawm	June 6 mos.	100	43,989 310,297 354,454	1,982	370,	506 86,343 547 75,476 560 353,689	13 108,069 71,381 89 537,763	1 17,977 13 112,036	7 73,900	-	1	09		1		
on next	Pittsburgh & West Virginia	6 mos.	138	2,089,521 61,645 500,140		508	, 44		1,315 8,443 8,443 66,729	27,734 187,883 29 1,861,407	77,099 3 456,636 7 3,428,173 6 21,234,229	3 122.0 89.7 66.2 9 66.8	13,930 52,041 1,751,377 10,534,092	0 22,074 1 22,074 7 1,359,951 7 7,723,491	1,460,366 1,7,927,169	10,093 1,129,932 6,610,112	1,718
eft-ha	Reading	June 6 mos.	1,452	4,661,250 28,516,263	-	31,768,	73	v.				5 74.3	1,427,220	25 110,704 20 1,058,077	74,038	55,890	101,139 862,708
nd page	Richmond, Fredericksburg & Potomac.	6 mos.	117	378,042	1,448	,942 4,710,6	,692 345,7 ,692 345,7	28 804,47,	~	1,738,02		. 1				١	



# Railroad Reports Over Recent Years Show That Repairs On Old Equipment Are Potent Factor In Reducing Profits Of Carriers

"A railroad man recently explained the high repair costs of equipment on his road last year by saying that the line until recently had purchased no new cars or engines for several years. . . .

"Effect of repair item on revenues is apt to become more evident in periods of rising traffic as older motive power and rolling stock can be relegated to storage when loadings drop, while they must be brought out and put into serviceable shape to take care of ascending traffic. Naturally, the newer and more efficient equipment is put on the lines first with the result that as older and still older cars and engines start operating to meet rising shipments, not only repairs but double heading shorter trains, fuel and labor shoot cost up out of all proportion to volume of business.

"The idea is general throughout industry that in periods of rising business, ratio of cost increase should be considerably lower than that of gross business done. In the past four years, however, maintenance and transportation costs of the roads have risen at approximately the same rate as have gross revenues. In other words, the railways do not seem to be obtaining anything like the full benefits that should be expected from betterment of traffic. . . .

"While comparisons between various roads are hardly possible because of the many individual factors in the situation, it is noticeable that the road with the lowest percentage of old equipment is the only road to show a lower repair cost per traffic mile in 1936 than in 1934."

Arundel Cotter Wall Street Journal July 8, 1937

AMERICAN LOCOMOTIVE COMPANY
30 CHURCH STREET-NEW YORK-N-Y

REVENUES AND EXPENSES OF RALLWAYS MONTH OF JUNE AND SIX MONTHS OF CALENDAR YEAR 1937—CONTINUED

			Mon	ONTH OF JUNE	AND SIX M	IONTHS OF C	ALENDAR YE	EAR 1937-C	CONTINUED						
	Av. mileage operated		Operating revenues	ues	Mainter Way	enance of-	Operating expenses	nses			Net		Net rail	railway operating	rincome
Name of road	period	Freight	Passenger	(inc. misc.)	structures	ment	Traffic	portation	Total	ratio	operation	income	1937	depreciation 1936	preciation
RutlandJune of mos. St. Louis-San FranciscoJune 6 mos.	4,926 4,926 4,926	\$216,788 1,236,249 3,898,492 20,667,657	\$28,564 177,143 311,351 1,810,472	\$313,192 1,796,262 4,541,728 24,680,436	\$47,743 239,365 637,652 3,633,512	\$58,580 362,649 998,408 5,482,887	\$11,179 64,084 112,162 676,537	\$134,843 873,236 1,562,028 9,400,262	\$269,500 1,635,701 3,491,451 20,294,622	86.0 91.1 76.9 82.2	\$43,692 160,561 1,050,277 4,385,814	\$4,252 21,109 700,870 2,378,491	\$4,506 30,030 722,699 2,413,428	\$26,339 -28,185 355,528 1,687,523	\$6,804 97,990 984,894 3,985,460
St. Louis, San Francisco & TexasJune 6 mos. St. Louis Southwestern LinesJune 6 mos.	261 261 1,749 1,749	118,351 656,230 1,536,344 10,061,093	2,443 28,244 160,118	124,447 688,237 1,637,789 10,664,167	26,425 160,356 324,062 1,768,801	15,629 78,215 274,017 1,861,519	8,911 43,172 77,612 467,096	58,445 326,266 585,435 3,467,614	116,233 650,182 1,339,199 8,037,706	93.4 81.8 75.4	8,214 38,055 298,590 2,626,461	12,886 183,240 1,963,220	28,713 -204,613 -4,515 861,242	32,029 305,587 279,016 1,569,512	-28,612 -204,003 45,249 1,162,461
Seaboard Air LineJune 6 mos. Southern Railway	4,307 4,307 6,639 6,639	2,466,167 17,652,602 6,218,923 41,517,492	3,178,274 3,178,274 869,313 5,010,832	3,096,606 23,075,308 7,796,319 50,907,645	498,594 3,002,210 1,036,923 6,138,801	694,401 4,238,617 1,669,350 9,539,581	154,330 967,147 146,091 899,962	1,188,989 8,131,132 2,724,615 17,343,149	2,720,371 17,565,062 5,890,787 35,814,628	87.9 76.1 75.6 70.4	376,235 5,510,246 1,905,532 15,093,017	3,820,246 1,300,392 11,550,176	2,956,263 978,369 9,267,498	35,463 1,161,953 1,247,593 7,759,243	278,610 3,917,381 1,238,621 10,836,259
Alabama Great SouthernJune 6 mos. Cinn., New Orleans & Texas Pacific.June 6 mos.	315 315 336 336	508,736 3,158,458 1,246,548 7,556,285	63,625 326,800 93,941 711,627	3,737,212 1,419,209 8,812,220	92,185 526,368 156,684 1,085,776	131,773 822,807 254,113 1,615,400	11,999 70,674 26,121 155,858	1,125,849 334,891 2,165,340	2,673,600 823,134 5,350,290	72.5 71.5 58.0 60.7	1,063,612 596,075 3,461,930	114,313 749,573 467,046 2,754,019	92,421 639,763 451,264 2,586,734	66,775 370,038 368,122 2,221,516	115,642 779,246 501,310 2,886,998
Georgia Southern & FloridaJune 6 mos. New Orleans & NortheasternJune 6 mos.	397 397 204 204	124,063 797,484 226,119 1,390,905	25,172 335,130 21,858 125,089	165,779 1,281,706 265,543 1,622,181	36,237 200,424 <b>36,349</b> 211,215	37,926 234,939 31,794 207,533	2,154 11,622 5,411 32,480	75,238 498,271 78,086 466,685	157,014 999,670 162,507 983,489	94.7 78.0 61.2 60.6	8,765 282,036 103,036 638,692	-7,301 195,663 68,141 415,441	7,571 156,882 47,045 305,403	-12,529 19,183 30,309 111,500	197,848 53,063 341,581
Northern Alabama	100 100 8,764 8,769	56,915 378,393 11,916,677 66,579,014	1,632 10,027 2,307,529 11,083,923	60,545 400,523 15,655,489 84,847,954	1,519,081 8,321,873	1,163 9,049 2,645,379 14,793,296	1,426 8,012 337,466 2,050,171	18,961 124,333 5,772,415 34,200,806	40,017 225,015 11,157,259 64,865,557	66.1 56.2 71.3 76.4	20,528 175,508 4,498,230 19,982,397	14,524 139,928 3,280,743 13,421,967	1,583 69,927 2,361,652 9,293,294	7,037 56,312 3,054,709 8,376,327	1,631 70,238 2,866,885 12,287,859
Southern Pacific Steamship LinesJune 6 mos. Texas & New OrleansJune 6 mos.	4,421	3,658,128 3,114,237 20,166,852	30,412 136,358 337,629 1,750,330	3,959,774 3,761,992 23,670,247	19,011 111,457 637,083 3,590,699	92,083 550,547 746,392 4,146,907	18,538 107,323 122,339 734,494	453,604 2,872,202 1,331,678 7,888,615	3,755,108 3,058,203 17,820,484	91.3 94.8 81.3 75.3	57,143 204,666 703,789 5,849,763	38,499 110,703 391,853 4,054,389	37,652 49,382 106,449 2,639,038	8,123 -116,504 255,310 1,545,047	72,789 260,133 238,772 3,436,666
Sokane, Portland & SeattleJune 6 mos. Tennessee CentralJune 6 mos.	946 946 286 286	637,428 3,734,005 183,508 1,162,501	56,240 241,916 5,798 30,150	748,772 4,295,479 200,864 1,263,265	100,807 479,765 40,030 232,273	89,203 531,840 28,069 189,746	9,144 55,589 6,477 37,539	296,326 1,621,350 70,295 435,739	526,429 2,865,256 155,075 955,630	70.3 66.7 77.2 75.6	222,343 1,430,223 45,789 307,635	285,339 1,190,472 36,078 263,813	224,764 863,910 18,611 157,159	118,381 354,687 38,223 189,339	240,286 956,816 24,607 192,880
Texas & PacificJune 6 mos. Texas MexicanJune 6 mos.	1,948 1,948 162 162	2,149,801 12,704,531 100,792 690,092	254,222 1,292,338 2,923	2,613,407 15,138,960 116,249 771,120	289,958 1,571,122 17,207 107,308	467,352 2,707,246 18,883 108,678	75,906 471,581 3,732 21,190	800,511 4,573,008 42,206 243,090	1,764,674 10,146,837 89,680 526,605	67.5 67.0 77.1 68.3	848,733 4,992,123 26,569 244,515	657,693 3,854,994 42,652 225,447	522,568 3,054,196 33,679 174,416	385,002 2,389,784 —10,993 127,543	619,346 3,637,461 35,530 185,482
Toledo, Peoria & WesternJune 6 mos. Union Pacific SystemJune 6 mos.	239 239 9,911 9,915	1,124,189 1,124,189 9,621,322 60,666,678	1,802,398 7,795,295	1,139,426 1,139,426 12,692,191 75,157,871	61,521 280,728 1,912,146 9,616,922	14,759 85,418 2,561,203 16,002,121	17,532 105,584 430,256 2,241,538	42,995 281,405 4,165,436 26,352,047	152,707 819,055 9,887,724 58,983,178	81.5 71.9 77.9 78.5	34,723 320,371 2,804,467 16,174,693	24,880 230,414 1,716,203 8,578,855	10,077 131,825 1,190,712 5,331,986	21,311 166,668 1,797,973 4,965,017	20,229 185,848 1,751,133 8,684,015
Utah	111 111 618 618	46,755 622,841. 1,540,786 9,151,685	3,683	46,779 623,568 1,604,327 9,557,316	17,008 104,520 137,812 713,496	20,274 219,930 344,125 1,784,154	2,426 21,456 125,676	12,486 165,989 248,072 1,538,741	54,234 519,367 786,723 4,345,107	83.3 83.3 49.0 45.5	7,455 104,201 817,604 5,212,209	-3,477 48,664 622,604 3,980,209	3,451 38,923 715,703 4,457,341	—10,005 65,898 541,663 3,916,839	13,437 98,743 809,353 5,025,414
Wabash         6 mos.           Ann Arbor         - June           6 mos.         6 mos.	2,433 2,440 293 293	3,039,428 20,720,064 325,280 1,997,352	246,499 1,218,631 3,350 16,433	3,535,892 23,455,187 339,055 2,065,471	559,314 2,768,422 33,270 163,300	590,926 4,363,033 78,605 491,321	159,009 911,452 12,756 73,814	1,389,516 8,790,630 135,916 863,283	2,845,795 17,744,485 271,983 1,660,085	80.5 75.7 80.2 80.4	690,097 5,710,702 67,072 405,386	487,789 4,385,429 48,232 286,292	220,995 2,607,223 34,251 190,110	192,575 2,324,477 35,836 156,836	3,676,104 52,541 308,054
Western MarylandJune 6 mos. Western PacificJune 6 mos.	879 882 1,207 1,207	1,358,203 8,849,146 1,216,088 7,196,108	8,176 39,452 49,660 204,322	1,400,837 9,118,261 1,328,037 7,623,214	234,323 1,224,540 428,601 1,852,618	302,646 1,937,318 307,567 1,798,628	35,854 236,552 60,397 346,864	2,263,065 516,510 3,200,178	979,715 5,978,570 1,370,295 7,514,248	69.9 65.6 103.2 98.6	3,139,691 42,258 108,966	301,122 2,424,691 -132,865 -395,920	318,344 2,493,769 -202,056 -817,858	315,182 2,109,269 343,423 853,767	416,683 3,061,606 —147,216 —496,536
Wheeling & Lake Eriefune 6 mos.	512	1,262,386	1,728	1,340,431	201,976 932,169	291,124	34,583	428,147	986,463	73.6	353,968	372,852	498,962	328,120	574,892 2,986,590